

REHABILITATION LITERATURE

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Dr. Brand, Leprosy, and Rehabilitation

By Howard A. Rusk, M.D.

Rehabilitation Literature in this issue carries one of the finest articles since it began publication—the article “Life After Leprosy Through Rehabilitation” by Dr. Paul Brand.

Most of us in the United States who are concerned with rehabilitation have little firsthand experience working with leprosy patients. In fact, we in the United States use the name Hansen's disease to describe this disease rather than the term leprosy. Hansen's disease was named after the Norwegian physician who in 1871 discovered its cause, *Mycobacterium leprae*.

Erroneously feared by man as one of the world's “loathsome” diseases, leprosy has carried a stigma and fear since ancient times and during the Middle Ages when the term was used in a collective sense for all types of skin diseases. In the Middle Ages, the fearful words “Dead to the world henceforth, now place your hope in God” cast lepers out of society. We know now, however, that it is actually a mildly communicable, chronic disease that is not nearly so contagious as some other communicable diseases, such as tuberculosis.

Hansen's disease is found most frequently in tropical and subtropical regions. Of the estimated 12 million cases in the world, there are only about 1,000 to 2,000 in the United States, primarily in the southern parts of Florida, Louisiana, Texas, and California and the new State of Hawaii.

In New York City the Department of Health reports about 25 cases of the disease each year. All these cases have originated outside the city and there has never been a case resulting from contact with other local cases. The only New York City health restrictions are that patients report for examination twice each year and refrain from handling food, caring for children, or nursing the sick.

We in the United States have two outstanding rehabilitation services for persons with Hansen's disease—the U.S. Public Health Service Hospital at Carville, La., and Hale Mohalu on Hawaii's main

island of Oahu. The most highly publicized of resources for Hansen's disease in the United States is the well-known Kalaupapa Colony on Molokai Island in Hawaii. This colony, based on segregation, is slowly being eliminated. Since 1949 all new cases of Hansen's disease in Hawaii have been treated at Hale Mohalu, just a few miles outside Honolulu. Both treatment and the hospital's rehabilitation program, operated by the Hawaii State Division of Vocational Rehabilitation, are oriented toward the return of the patient to active life in the community.

In his article in *Rehabilitation Literature*, Dr. Brand outlines some of the newer treatment methods that can arrest leprosy and make rehabilitation possible. Dr. Brand, however, more probably than any one other person in the world, realizes that in leprosy arrest of the disease does not constitute rehabilitation.

Just as with other diseases that produce extreme physical disability, the patient whose leprosy has been arrested must have maximum physical rehabilitation, social services, psychological help, rehabilitation counseling, and vocational training if he is to be reintegrated into the main stream of life. Experts estimate there are some 2½ million persons in the world who are deformed because of leprosy and need rehabilitation services.

That Dr. Brand recognizes this is attested to not only by the accompanying article but by concrete steps he has taken to introduce modern methods of medical and vocational rehabilitation into his program at Christian Medical College and Hospital in Vellore, India.

This past January, Dr. Mary Verghese, one of Dr. Brand's associates, began long-term training at the Institute of Physical Medicine and Rehabilitation, New York University Medical Center, under the Charles Poore, Jr., Memorial Fellowship of the World Rehabilitation Fund. Dr. Verghese is a paraplegic as a result of an automobile accident in 1954, two years after she was graduated from Christian Medical

(Continued on page 245)

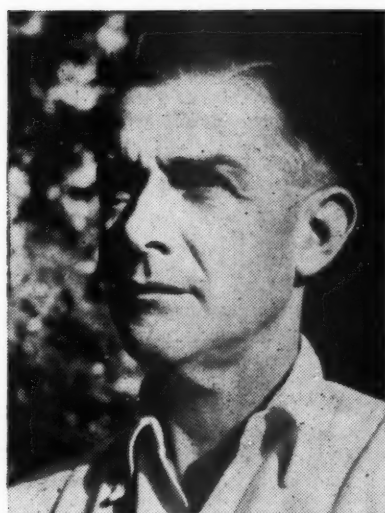
REHABILITATION LITERATURE

Article of the Month

Life After Leprosy

Through Rehabilitation

Paul W. Brand, F.R.C.S.



About the Author . . .

Dr. Brand is director of orthopaedic surgery, Christian Medical College, Vellore, India, and William Jay Schieffelin Sanatorium, Karigiri, and director of New Life Center, a rehabilitation village in which he teaches patients with leprosy to work with their hands. In 1943, he received his F.R.C.S. in London and was appointed to the Children's Hospital, where he specialized in poliomyelitis. It was in 1946 that Dr. Brand took over his present post at Vellore. His experience with poliomyelitis and with the war-injured in England spurred him to try to find new methods of dealing with hands paralyzed by leprosy. Dr. Brand is a member of the World Health Organization Expert Panel on Leprosy, has been a leading participant in international leprosy congresses, and has had many articles published in medical and allied journals. His wife is an ophthalmologist at Vellore Christian Medical College and is studying eye problems at the American Leprosy Missions-supported Karigiri Sanatorium. This original article was written especially for *Rehabilitation Literature*.

LEPROSY HAS SUDDENLY become one of the most important rehabilitation problems of our time. Until recently, the outlook has been so hopeless for its 12 million sufferers that serious rehabilitation was attempted by only a very few. Little or nothing was done about the mutilations and paralysis of the disease for two main reasons: first, leprosy was incurable and it was thought that its deformities would be progressive unless the disease were cured and, second, if a patient has to be segregated for life anyway, why worry about mutilations that are common to all in the colony?

This may seem a harsh analysis of the reasons for public and medical inertia, but "out of sight, out of mind" explains many human attitudes that could only be called cruel if they were deliberate. Many devoted persons and missionary organizations have endeavoured to make life tolerable and even pleasant for leprosy patients; they have cared for them and loved them in spite of their deformities. This is different from what we now mean by the word *rehabilitation*.

In the last 12 years, two great changes have come about. The first is the emergence of proved effective remedies for leprosy. The disease is no longer incurable. The second is the development of a whole series of reconstructive operations for the mutilations and paralysis caused by the disease.

The world is now faced with up to 12 million people who want to get back to life. All of them will have to combat prejudice; perhaps a third of them will have the additional handicap of physical disability or obvious deformity. The problem cannot be shrugged off as hopeless any longer. Proved technics are available and more will doubtless be developed soon, but the task is tremendous. It is difficult chiefly because the basic machinery for rehabilitation in leprosy simply does not exist in the countries where the disease is prevalent. There is organisation for distributing tablets. There are centres for the care of the very sick. There

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are homes and colonies where food and shelter and sometimes occupations are provided.

But for the deformities? Thirteen years ago there was not one reconstructive surgeon working on leprosy deformities anywhere in the world. Now there may be a dozen, one for each million patients. If we were to have the surgeons, where would be the operating rooms, the trained nurses, the physiotherapists for preoperative and postoperative education, the rehabilitation officers to find jobs for the expatients and to provide sheltered industries for those who still need care?

The greatest danger now is that we, who previously did nothing because we thought nothing could be done, will now do nothing because the little we can do seems so small compared with the size of the problem.

To make a start, we need first to understand something of the nature of the peculiar difficulties associated with rehabilitation in leprosy. I will first enumerate them and then try to analyse each main difficulty, point out its cause, and suggest its treatment. Finally, again facing the problem as a whole, we may consider the basic framework of a rehabilitation programme for leprosy. A beginning must be made. An example must be given. Each affected country will then begin to shoulder its own rehabilitation problem and make it part of its health and social services programme.

Analysis

Rehabilitation is difficult for the leprosy patients for the following reasons: 1. *Fear*. The public is deeply fearful of the disease. It regards marks and scars of leprosy on an expatient as signs of infection and therefore of danger. 2. *Disability*. The paralysis and mutilations caused by leprosy may make skilled work difficult or impossible. 3. *Ugliness*. Facial and other disfigurements make it difficult for the patient to find acceptance even when full skill and activity have returned. 4. *Danger*. Because hands and feet sometimes remain anaesthetic, even after treatment, some kinds of manual work constitute a continuing danger to the patient. 5. *Apathy and Despair*. The arrest of leprosy may take several years. Long segregation of a patient from his old friends and old skills makes his return a psychological problem. Even if nobody uses the word, he has become a "leper." Leprosy does not affect the brain, but the treatment meted out to the patient by his old associates often causes mental reactions of deeply rooted bitterness or of apathy, which make rehabilitation difficult.

The Problem of Fear

Most age-old superstitions and taboos have some reason behind them. It is wrong to discard them lightly. The fear of leprosy is based on the realisation that it is contagious. It would be wrong to encourage indiscriminate social intercourse for infectious patients. The public (in-

cluding the medical profession) needs education on basic facts such as the following:

1. Even at its worst, leprosy is not highly infectious.
2. It can be rendered completely noninfectious by treatment.
3. Deformities do not mean present infection, any more than the pockmarks of smallpox or the paralysis of poliomyelitis means that the disease is still active.
4. A "negative certificate" from a doctor can be trusted to mean that the disease has passed, even if deformities remain.

Publicity campaigns, backed up by posters, films, and pamphlets are an essential part of the campaign for leprosy rehabilitation. The techniques already used in the publicity to "Hire the Handicapped" can be utilised in this field also. Social workers, equipped with audiovisual aids, should visit in advance the families and workshops that are to receive healed patients.

In Vellore, India, one of the most effective methods of altering public opinion has been the integration of treatment of leprosy with that of other diseases in the Medical College and its outclinics, along with the establishment of a leprosy rehabilitation centre in the town, where it can be seen and visited by the public. It soon becomes obvious that the medical profession and the social workers are unafraid and that the expatients are happily and usefully at work. The whole town is soon buying and using articles they make. This living demonstration is a great strength to the whole publicity campaign.

Disability and Deformity

Most of the terror surrounding the word "leper" comes from the idea of gross deformity and open sores. A great deal of work needs to be done before we can claim to understand the pathology of deformity in leprosy, but as a beginning I have suggested that it be divided into two main groups: *Primary* and *Secondary*.

Primary deformity occurs during the active phases of the disease and is due to leprosy itself. It includes paralysis of the nerves to the hands, feet, and face, the collapse of the nose and sagging of facial skin, loss of eyebrows, blindness from eye involvement, and stiffening and distortion of fingers following local "reactions" in the hand.

Secondary deformity follows nerve paralysis and is due to misuse of the hands and feet when they are unable to feel heat or pain; it includes blindness due to exposure of the eye after paralysis of the eyelids and destruction of the feet by deep trophic ulceration.

Primary Deformity

In the *lepromatous* form of the disease, deformities usually occur late, so that early diagnosis and treatment may often completely prevent their occurrence. Once the disease has become established, however, most of the

damaging effects occur during periods of acute exacerbation, known as "reaction," during which antileprosy drugs may be useless or actually harmful. The corticosteroids and other anti-inflammatory drugs may allow patients to pass through these active periods without much harm, but their cost is still considered too high for widespread use throughout the world. Even in the poorest countries, however, early treatment of eye complications must be provided. The judicious combination or alternation of antileprosy drugs and intraocular hydrocortisone could completely prevent blindness in thousands of patients now losing their sight. Primary deformity in the hands can be minimised by care and splinting even when expensive drugs are not available. For this a physiotherapist is needed.

In *nonlepromatous* leprosy, deformity and paralysis may occur early and may even be the first sign of the disease. Here the damage is mainly to nerves. Paralysis and anaesthesia of the hands and feet and face including the eyelids commonly result.

Result of primary deformity.—If proper advice and basic medical care are given the patient, so that such things as blindness are prevented, leprosy itself may result in the following disabilities:

- Anaesthesia (to all sensations) in hands and feet.
- Paralysis of all intrinsic muscles in hands and feet.
- Paralysis of lifting muscles of the foot.
- Stiffness and distortion of the fingers, from "reaction."
- Paralysis of eyelids and some other facial muscles.
- Collapse of the nose.
- Sagging and wrinkling of facial skin.
- Loss of hair from face.
- Deformities of the external ear.

On the credit side, the disease does *not* affect the heart or lungs, the digestion, central nervous system, the urinary system, or any of the nerves, muscles, bones, or joints supporting the pelvis, abdomen, thorax, neck, upper arm, hip, or thigh.

Leprosy is a disease of the periphery and of the surface. In the extreme periphery, hands and feet, nose and ear, it may be grossly paralysing and damaging. In the intermediate zone between the centre and the periphery, beyond the elbow and the knee, paralysis is selective and predictable. Muscles supplied by the ulnar nerve and lateral popliteal nerve are regularly paralysed, while those supplied by the median and medial popliteal nerves are regularly spared.

Treatment.—The fact that in leprosy the paralysis is selective and predictable means that the reconstructive surgeon can intervene with predictable success in all cases. Whereas in poliomyelitis a limb may be totally paralysed and beyond the reach of surgical help, in

leprosy a whole group of forearm muscles remains unparalysed and can be redeployed to transform a useless hand into a strong and active member.

The leprosy-distorted face offers scope for the plastic surgeon. Postnasal inlays, followed by cartilage grafts, face-lifting operations, and eyebrow grafts, may restore

Dr. Doull Comments on

The Incidence of Leprosy

"LEPROSY IS an uncommon disease in the continental United States, the known prevalence being fewer than 1,000 cases. It occurs indigenously at a low level in southeastern Texas, still lower in Louisiana, and rarely in southern California and Florida (Key West). Occasional cases are detected among immigrants from areas in which the disease is endemic and among missionaries, educators, veterans of the military services, and others who have lived temporarily in such areas. When the known cases in Hawaii, Puerto Rico, and American Samoa are added, the total count is still well below 2,000. Despite its low prevalence in the United States, leprosy excites the interest of American physicians because of its unique history, the complexity of its clinical syndrome, its great public health importance in many countries—the world total being estimated at 10 million—and the challenge which its unsolved problems offer to science."—From "*Current Status of the Therapy of Leprosy*," by J. A. Doull, M.D., p. 108, in J. Am. Med. Assn., May 28, 1960.

normality to a face that would otherwise be an absolute and permanent barrier to any sort of rehabilitation.

The provision of an eyelid sling or temporalis muscle transplant for paralysed eyelids is sometimes urgently needed to prevent blindness from exposure of the cornea.

In short, most of the primary disability and deformity in leprosy not preventable by medical treatment is correctable by reconstructive surgery. At the present time the chief exceptions are the hands that have been "frozen" and distorted by severe reactions. Even these should become less frequent as physicians and physiotherapists work together and learn how to preserve the function of the hand through these stormy phases of the disease.

When everything has been done for the prevention and correction of primary deformity in leprosy, one may be left with a healthy, good-looking young person, with strong and active hands and feet, *but*, in many cases, still without sensation in hands and feet. This loss of sensation is the basis of secondary deformity.



Dr. Brand examines toy made by young patient with new hands, Vellore, India.

Leon V. Kofo

Secondary Deformity

One of the best known and most feared attributes of leprosy is the progressive destruction of hands and feet. There is a popular idea that the flesh of leprosy patients rots away, that fingers fall off, and that leprosy ulcerates the feet until they are destroyed. This popular idea is based upon observation. Fingers and toes do disappear, and feet are in fact destroyed. What is the cause? Is it preventable? These questions must be answered if rehabilitation is to become a reality.

Workers in leprosy have always realised that anaesthetic hands and feet are accident-prone and that patients sometimes lose their digits by severe burns and injuries. But they seem to have assumed that most losses of fingers are unavoidably part of the disease. They may have accepted a hypothesis that seemed reasonable to me some years ago, that when a patient had severe loss or absorption of only one or two digits the cause was probably accident or infection, but where all fingers were equally absorbed the cause was probably uncomplicated leprosy.

This hypothesis seemed inadequate when more careful analysis revealed the following facts:

1. The most severe absorption occurs in patients who are "negative," either healed or burnt-out cases.
2. The type of leprosy that has the highest proportion of absorption is the neural or tuberculoid type, in

which the bacilli do not invade the bone (Gass) but are confined mostly to the nerves and the skin.

3. That certain occupations are associated with a high rate of finger absorption (*e.g.*, cooking) and conversely that special care of the hands can prevent absorption altogether.

4. In the rare cases of really severe paralysis in leprosy where early clawing is combined with radial palsy and wrist drop—where the patient cannot use his hand at all—the length of the fingers is fully preserved. The finger tips, tucked away permanently clenched into a fist, are *out of harm's way*.

5. Identical clinical and radiological pictures of absorption may be found in syringomyelia, a non-bacterial disease of the spinal cord, causing loss of pain sensation in the fingers.

"Primary" absorption.—It is true that, in certain active phases of lepromatous leprosy, the bacilli not only invade the bones of the fingers but grossly soften and decalcify them. At such times the most trivial use of the hand or even the internal stresses of muscle spasm may cause destruction and crumbling of the bones and therefore shortening of the fingers. In any other inflammatory disease affecting bones and joints it has long been recognised that absolute rest in the position of function is essential. Only in leprosy, "the disease apart," have such

fundamental orthopaedic principles been neglected. Pater-son and others have pointed out that in leprosy, even in the grossest involvement of bone, there is no sequestration and that recalcification takes place and the bones regain strength if only they have been preserved by splintage through the dangerous phase. Bone cysts remain to identify a bone that would have crumbled away if no care had been taken.

"Secondary" absorption.—The absorption of fingers is commonly due to: 1) Accidental injuries and burns due to loss of pain sensation. 2) Continued use of an injured or infected finger causing spread of infection. 3) Unguarded strength applied through finger tips even in household tasks *not needing strength*. The patient cannot gauge the force he is applying. 4) Scarring of soft tissues caused by 1, 2, and 3, reducing the blood supply and resilience of the tissues and secondarily affecting the bones. 5) "Trophic changes" in tissues after loss of nerve supply, not fully understood and not peculiar to leprosy. They make tissues less able to withstand heavy stresses and strains but do not cause actual absorption if care is taken to regulate the stresses to which the limb is exposed.

Our experience in an active rehabilitation centre over the past 10 years has demonstrated that the progress of absorption can be halted. Patients without any sensation in their hands and feet can undertake work such as carpentry and continue year after year with no further loss of length or substance of their limbs. Such cuts or injuries as occur heal normally if dressed and splinted as soon as they occur.

The idea is false that an insensitive hand is useless or necessarily clumsy. A person accustomed to controlling all his hand movements on the basis of his sensations finds himself helpless and clumsy when he loses these sensations. It needs training and encouragement to learn to substitute eye control for skin and joint sense. Once established, such control is highly efficient in all activities except those where finger-tip touch is an integral part of the work. No insensitive hand could compete with a normal one in basketmaking, for example, or even in doing up buttons but may become as skillful as the normal hand in using most tools, instruments, or machines. *Thus, even though sensation may be lost, secondary deformity is preventable and a patient may learn to work without fear of losing his hands and feet.*

Danger

The fact that the exleprosy patient may be still "at risk" must modify rehabilitation programmes. The risk is minimal if certain precautions are taken at the very beginning of rehabilitation and continued throughout life. For example: Cigarettes should be used only in a holder. Hot drinks should never be accepted in a mug without a handle. Handles of all tools should be adjusted for size

and shape to fit the hand and to spread the stress of grasp. They should be smooth and free from splinters and cracks. Shoes must be specially made and fitted, so that insensitive feet are not damaged. A patient will accept a shoe that would make a normal person scream with pain and will continue walking with a blister that would have immobilised anybody with pain sensation. Microcellular rubber soles have proved of great value in the prevention of destructive trophic ulcers. Hands and feet should be routinely inspected every night and by the patient himself to look for thorns, splinters, or blisters; otherwise, unfelt they will remain unnoticed and cause an infection. Every wound or infection, in addition to being dressed, must be *splinted*. The splint is to prevent movement that pain would prevent in the normal hand.

All these precautions become second nature if practised with discipline for a time in a re-education centre. Some of our boys who at first never had less than two or three open burns or wounds on their hands at any given time now are working year after year with never an injury to be seen. They still have no sensation, but a new kind of alertness has been built into their pattern of life.

Apathy and Despair

In leprosy the most important rehabilitation task is the preservation of the personality, the maintenance of morale. This does not mean that the patient necessarily needs entertainment or diversionary therapy. Film shows and variety entertainments may help to make a man less conscious of his misery; a far better thing is to remove the basic cause of his misery. His despair is not due to the disease; it is due to segregation from his family and friends and to a feeling that he is useless and unwanted.

The antidote is to have continued contact with his family and to work whole time at a productive job. Expert committees of the World Health Organisation have pointed out that compulsory segregation is poor policy for the eradication of the disease. It only drives patients to concealment and therefore increases their danger to the public.

Even when hospitalisation may for a time be advisable during acute phases of the disease, social workers must make it their business to keep patients in touch with their families and to prepare for their return.

Leprous patients are rarely ill enough to be off work for long. They thrive better and recover more quickly if they are busy in a job. If they cannot be advised work in the outside world, they should be provided with work in a sheltered industry or craft-training centre, where they will have regular hours, regular pay, and the prospect of employment in a similar trade on their discharge.

Too often it is assumed that rehabilitation should begin only after cure of the disease. In some diseases that sequence may be logical. In the case of leprosy most

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of the psychological harm is done in the first few months after the diagnosis is made. It is then that despair strikes. It is then that the patient's whole world crumbles away. It is then that he begins to feel persecuted and to feel that no effort is worthwhile. That is the root of apathy, and it is a root that deepens and ramifies widely. *Rehabilitation must start on the day of diagnosis*, or as soon thereafter as the social worker can introduce the patient to the new world that for such a short time must replace his old, until he is ready to return, freshly equipped, and with a warm welcome awaiting him.

It is terrible to realise that millions of men and women have for years been condemned to isolation and misery, when the means for their restoration to family and home and a job have been available. Surgical reconstruction would have been effective long ago, before the era of the new antileprosy drugs, and would have made it possible for patients with burnt-out and noninfectious leprosy to resume normal lives.

The Great Question

Why is it that, while we are applying the known technics of reconstruction and rehabilitation to the paralysis of poliomyelitis, to nerve injuries, and to deformities from burns, the patient with leprosy having similar paralysis and deformity has been left out?

It is not because of special difficulty. I do not believe that it is because the medical profession is afraid of the disease. It is because leprosy is not thought of as a disease at all. It simply does not enter the mind of the average medical specialist that leprosy has anything to do with him. Leprosy is still a curse rather than a disease. It is the field of the missionary or of the doctor who has chosen to dedicate his life to "the lepers." The very dedication necessary for this work has involved a separation of the worker from his colleagues and from the current stream of advancing medical science.

The leprosy control schemes of the World Health Organisation and of most governments are based on non-medical personnel, specially trained for the job of detection and treatment of this one disease only. The treatment they learn is only that of mass distribution of one effective drug. The doctors who organise and supervise these schemes are specialists in public health and epidemiology rather than in internal medicine or surgery. Ophthalmologists, neurologists, plastic surgeons, physiotherapists, and orthopaedic surgeons are not called in to advise or treat the crying complications that are the real disaster in an otherwise rather mild disease. It is true that many control schemes are in areas where specialists are not available, but this pattern is true even where specialists and medical colleges are actively at work on every other disease. I was an examiner in surgery for the M.B.B.S. of a university in an area where the incidence of leprosy is more than one percent of the population. I showed the

candidates a perforating ulcer of the foot; almost every candidate suggested that it might be due to tabes or diabetes; all but a few had to be reminded of leprosy before it entered their minds. Yet in other respects these were good candidates and they qualified to become practitioners of medicine in an area where leprosy was one of the commonest diseases.

Programme for Rehabilitation

Until the medical profession is educated, how can we expect education of the public to be effective? While medical colleges exclude residual leprosy deformities from their reconstructive surgical units, how will the public believe that these patients may go home and take a job?

The best education is demonstration.

International agencies must help to establish reconstruction and rehabilitation units *in the medical colleges* of leprosy-endemic countries. A few good units will serve as training centres and as platforms for propaganda. Not only will they train surgeons and physiotherapists for work in leprosy, but they will put leprosy into its proper perspective for the new generations of medical men and specialists in related fields. They will also awaken interest in research workers who will welcome a new disease for investigation.

Simultaneously the problem of leprosy rehabilitation must be faced in the field. Each major campaign will have to have a small base hospital or mobile surgical team. Workers must be trained to detect early signs of danger and damage to eyes and limbs and refer patients to those who can care for them.

Where such a pattern has already been established in India, it has proved to be of great value, both to the patient concerned and to the whole leprosy campaign. Many patients discontinue their tablets when they realise that their trophic ulcers and deformities are not improved. As soon as interest is taken in these things that matter to the patient and a physiotherapist and a surgeon are made available, general interest and co-operation revive, and a higher proportion of the patients maintain their attendance.

If international agencies will initiate a programme to establish training units in medical colleges and to provide rehabilitation teams in a few antileprosy campaign areas, the governments in the countries concerned will quickly see their value and will shoulder their own responsibilities to widen the scope of this enterprise, and to make new life a reality for many who have long been regarded as dead.

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College. She had intended to specialize in obstetrics and gynecology, but after her accident she began work at the Christian Medical College Hospital in the surgical reconstruction of hands paralyzed or deformed by leprosy.

Leprosy has caused more hand disability throughout the world than any other single condition, but there are only five or six surgeons who devote themselves to this field. The hand surgery unit, the first of its kind anywhere, was started by Dr. Brand in 1940.

Dr. Brand knows and understands leprosy and he knows and understands India. He was born in India of missionary parents and spent his early life in some wild mountains where his father was doing pioneer missionary medical and relief work. Dr. Brand left India at age 10 to attend school in London. After graduation he became a builder, but at the age of 21 decided he, too, wanted to be a missionary and took a year's training in simple medical and tropical hygiene. This interested him in medicine and he went through the full medical course at London University.

During World War II, Dr. Brand worked at a casualty clearing station for bomb injuries during the London blitz. After further specialized training in surgery he went to Christian Medical College and began teaching orthopedic surgery. He became extremely impressed by the terrible deformities of people with leprosy and discussed the possibilities of reconstructive surgery for patients with the famed leprologist, Dr. Robert G. Cochrane. Although the surgical approach had never been used, Dr. Cochrane urged him to try.

Dr. Brand organized a research unit and began operating in cases of leprosy in 1947. In 1952, he was elected Hunterian Professor of the Royal College of Surgeons and gave the Hunterian oration on his work. In 1953, he received a Rockefeller Foundation grant for further study and in 1956 visited Nigeria to help start reconstructive surgery units there. Currently he has five or six surgeons at a time training in reconstructive surgery in leprosy.

In late November of this year, an international conference on surgery and rehabilitation in leprosy is to be held at Christian Medical College under the auspices of the World Health Organization, Leonard Wood Memorial, and the International Society for the Welfare of Cripples. A number of American specialists will be included among the 16 or 18 experts from throughout the world. The specialist in physical medicine and rehabilitation for the conference will be Dr. Masayoshi Itoh, a member of the faculty of the Department of Physical Medicine and Rehabilitation, New York University Medical Center. Dr. Itoh, now a permanent resident of the United States, had experience working with patients with leprosy in his native Japan and has had postgraduate training and experience in both hand surgery and physical medicine and rehabilitation in the United States.

Although the vast majority of rehabilitation workers in the United States will never see persons with leprosy, those who attend the special sectional meeting on leprosy of the Eighth World Congress and hear Dr. Brand are in for a rewarding experience that will supplement the knowledge of leprosy they gain from this excellent article.

Principles of Cleft Palate Prosthesis

By Cloyd S. Harkins, D.D.S.

with the collaboration of

William R. Harkins, D.D.S.

and

John F. Harkins, D.D.S.

Published for Temple University Publications by Columbia University Press, 2960 Broadway, New York 27, N.Y.

1960. 219 p. figs., forms. \$12.00.

**Reviewed by W. G. Holdsworth, F.R.C.S. (Edinburgh),
F.R.C.S. (England)**

About the Authors...

Dr. Cloyd Harkins received his D.D.S. degree in 1910 from the University of Pennsylvania. He is director of the Philipsburg Cleft Palate Clinic, Osceola Mills, Pa., and a member of the staff of Allegheny General Hospital Cleft Palate Clinic, Pittsburgh, and of St. Christopher Hospital, Philadelphia. He and John F. (D.D.S., University of Pittsburgh, 1938) and William R. (D.D.S., St. Louis University, 1943) Harkins are members of the American Association for Cleft Palate Rehabilitation and Fellows of the American College of Dentists and of the International College of Dentists.

About the Reviewer...

*Dr. Holdsworth qualified in Melbourne, Australia, and is a Fellow of the Royal College of Surgeons of Edinburgh and of England. During the war he served in the Royal Air Force and was at Queen Victoria Hospital, East Grinstead. He is now in practice in London and operates at Queen Mary's Hospital, Roehampton, as well as being consultant in plastic surgery to the South West Metropolitan Hospital Region. He is author of *Cleft Lip and Palate* (Heinemann, London, and Grune and Stratton, New York), the second edition of which was published in 1957.*

THE CORRECT TREATMENT for palate deficiencies and associated anomalies is often disputed and, as specialists have multiplied, so have the voices raised in advice. That these are conflicting is not surprising. However, the best results are rarely satisfactory, and, when a specialist speaks from experience, he must be accorded a careful hearing, even, or perhaps particularly, if resulting opinions are at variance with one's own.

A glance at Dr. Harkins's book, with its many clear photographs, assures that his words come from experience, and the dreadful deformities illustrated could well be studied by all who operate on children's palates. Few would dispute that, if this is the best we can do, then surgery is out. The text is agreeably free from wordy argument, and with these pictures words are not needed. One can only be surprised at the gentle tones in which the author would discourage surgery during development. Those of us who do operate early are seeking to provide the patient with the means to speak correctly, acknowledging that scar and deformity are the price, though hoping these need not be gross. If comparable speech could be shown to follow delayed operation, there would be little to be said for surgery in infancy.

The book states the problem facing the prosthetist in all its diversity, from the suspicious toddler to the edentulous veteran, from the soft palate that is free from scar to the woody organ containing little else. When surgery is deliberately delayed, the development of good speech is thought to be facilitated by fitting a small plate to cover the cleft. Then, too, a baby with a complete double cleft is sometimes provided with an expanding plate to encourage the premaxilla to fit between, rather

than in front of, the maxillae. These devices are not easy either to make or manage, and because of growth they require frequent replacement. Adult cleft patients, even in the absence of surgery, have teeth that are displaced and faulty, and because of malocclusion teeth tend to be lost early, raising the demand for a plate. Where surgery has failed to provide a palate that is long, mobile, and flexible, a prosthesis to help shut off the mouth from the nose may be the last hope for intelligible speaking. The need is stressed for thorough examination and devoted thought in making a plan for each differing individual, and apparently no case is beyond hope. The technics are well described and illustrated.

Much thought has been given in the past to devising prostheses that, in imitation of the palate, are mobile and in contracting and expanding can vary the oronasal aperture. If the ingenuity lavished on schemes for valves, slots, slides, springs, and hinges had been matched by results in speech, few problems would remain, but these have been disappointing. It is essential that escape of air behind the palate be alterable for succeeding sounds, but experience shows that the soft tissues can be entrusted to achieve this. The author is in line with modern thought

in advocating that prostheses be fixed and simple, light and slender, so as to preserve what remains of the palatal arch. While the acceptance of an internally rigid device simplifies the proposition, each must be individually and accurately tailored to the mouth, and the need is stressed for patient, repeated trimming and adjustment. The material must be easily and inexpensively extended and reduced, not only initially but perhaps later as the mouth develops and its muscles and bones change contour.

The co-operation of a surgeon may be required to divide adhesions between gum and lip or to ablate a loose or protruding premaxilla. A short immobile palate that is too tight may require division before a stable plate can be fitted, and, since his handiwork will be of no use in articulation, the surgeon need experience no regrets in recreating the cleft.

Dr. Harkins is to be congratulated both on his beautiful book and on the demanding task he has undertaken. The gratitude of his patients will be shared by the many dental surgeons who cannot fail to learn from his book and also, I suspect, by many surgeons who will be reassured by his capable presence.

Other Books Reviewed

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Bird-Headed Dwarfs; Studies in Developmental Anthropology Including Human Proportions

By: Helmut P. G. Seckel, M.D.

1960. 241 p. tabs., figs. Charles C Thomas, 301-327 Lawrence Ave., Springfield, Ill. \$10.00.

In this monograph presenting clinical material from a study of a rare type of dwarf characterized by Virchow as "bird-headed" or "nаноcephalic," Dr. Seckel, Professor of Pediatrics at the University of Chicago, documents and analyzes data on two such children whom he observed in his own work. He also includes reports on 13 well-documented and 11 incompletely documented cases appearing in the literature over the past 200 years. Technics and methods used in analysis are outlined and the analyzed data discussed from the standpoint of differential diagnosis, etiology, and pathogenesis. Of particular interest is the study of the Chicago girl first seen at the age of 2 and still under observation at age 15; the author hopes to publish a follow-up report on his patient when she reaches adulthood.

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Child in the Shadows; A Manual for Parents of Retarded Children

By: Edward L. French, Ph.D., and J. Clifford Scott, M.D.

AUGUST, 1960, Vol. 21, No. 8

1960. 156 p. J. B. Lippincott Co., E. Washington Square, Philadelphia, Pa. \$3.50.

Understanding of the facts concerning mental retardation is necessary if parents are to help their retarded children develop to the full extent of their capacity. The authors, both authorities in the training and education of subnormal children, discuss special needs of these children, problems facing parents attempting to meet these needs, and the resources available to aid them. The book is not intended as a substitute for, but as a supplement to, professional guidance. Those in a position to provide counseling, whether medical, psychological, or educational, will find the simple but lucid explanations useful in working with parents. A suggested reading list, with brief annotations, points out sources of additional information on the problems and care of the retarded. Both Dr. Scott and Dr. French are associated with the Devereux Foundation, which operates the Devereux Schools in Pennsylvania, California, and Texas and the Devereux Institute for Research and Training in the field of mental retardation.

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European Seminar on Sheltered Employment, 1959, August 31-September 8, The Hague, Netherlands

Organized by: The Netherlands Central Society for the Care of Disabled

(1960) 171 p. illus., tabs. Published by The Netherlands Central Society for the Care of Disabled and avail-

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able in the U.S. from the International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y. \$1.50. Paperbound.

The proceedings of the seminar include the five main addresses, comments by discussion leaders, and summaries and conclusions of the five discussion groups.

Contents: Concept; aims and principles of sheltered employment, A. Kaan.—Organization and financing, S. Elzvik.—Work projects, R. E. Luyckx.—Sheltered employment, rehabilitation and medical superintendence, C. G. Kongerslev.—Labour conditions and relations, G. O. Venn.

The appendix contains a summary of the replies to a questionnaire sent to the European countries participating in the Seminar; the data afford a comparative survey of services, facilities, and administrative practices among countries. A brief paper titled "Rehabilitation and sheltered employment in Switzerland," by A. Granacher, follows the survey chart.

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Fractures & Orthopaedic Surgery for Nurses and Physiotherapists

By: Arthur Naylor

1960. 358 p. illus. (4th ed.) Published by E. & S. Livingstone, Ltd., Edinburgh, Scotland, and available in the U.S. from Williams & Wilkins Co., Baltimore 2, Md. \$6.50.

In the preface to the first edition of this textbook for nurses and physical therapists, the author states his objective as showing how general principles applying to general and special surgery are applied to the specific field of orthopedic surgery. The book is intended to supplement lectures in surgery, by giving the student nurse or therapist a comprehensive understanding of all phases of total orthopedic treatment. This fourth edition has omitted obsolete illustrations, adding new photographs and diagrams; the sections covering shock, hand

For Your Leisure-Time, Professional Reading

THE PHYSICAL attributes of Goebbels were these: He was a little over 5 feet tall and weighed not much more than 100 pounds. Poliomyelitis at the age of four left him with a noticeable limp, which he became adept at concealing. He had considerable personal magnetism and charm, derived from a magnificent speaking voice, expressive eyes and mouth, and beautiful hands. These he was able to exploit to the full.

Dr. Goebbels, His Life and Death

By: Roger Manvell and Heinrich Fraenkel

1960. 306 p. Illus. Simon and Schuster, 630 Fifth Ave., New York 20, N.Y. \$4.50.

According to his biographers Manvell and Fraenkel the key to Goebbels's character and behavior was his constant need to be loved and admired, a feminine trait so pronounced that he accepted only those who emphatically and openly loved him. Hitler was astute enough to exploit this weakness, whereas his peers grew tired of his intrigues and tantrums. A succession of love affairs served to guarantee to Goebbels his superiority as a man of artistry and culture and to compensate for the constant irritation caused him by his physical inferiority.

It is hard to explain in terms of individual psy-

chology Goebbels's phenomenally fast rise to power and his success in dramatizing the promise of Nazism. His student life was not exceptional and his early ambitions as a literary artist were quickly frustrated. His fertile and agile mind created effective propaganda out of street and beer-hall violence, mass demonstrations, and public pageantry. The infallibility of the Fuehrer was one of many public myths he established. He controlled and used the press, radio, and movies as propaganda media, and as his philosophy ripened he regarded the Nazi administration and the conduct of the war itself to be tools for propaganda rather than the reverse. In his indifference to human values he approved of the mass destruction of Jews in Europe and also agreed with Hitler that a defeated Germany deserved to be destroyed. He was as isolated from people as he was from ideas; his nihilism was negative, unprincipled, and destructive. Goebbels's belief in propaganda was so real and his will to destroy so complete that he insisted that his wife and their six children die with him in Hitler's bunker.

The life and death of Dr. Goebbels, *Der Kleine*, coincides closely with the rise and fall of German fascism. A biography cannot explain entirely a personal and a social phenomenon, but Roger Manvell and Heinrich Fraenkel have made a readable and fascinating contribution to contemporary history.

—The Editor

injuries, and nerve injuries have been expanded. Chapters are included on orthopedic apparatus (casts, braces, splints, and traction devices), preoperative preparation of the patient and surgical equipment used, methods of correcting deformities, and the treatment of the wide variety of orthopedic conditions and diseases. The brief review of cerebral palsy and its treatment reflects physical therapy treatment practices in Great Britain. Theories of Kabat, Temple Fay, the Bobaths, Rood, and Collis are mentioned.

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Guide to a Community Health Study

By: Program Area Committee, American Public Health Association (Sewall Milliken, Subcommittee Chairman)

1960. 231 p. Mimeo. American Public Health Association, 1790 Broadway, New York 19, N.Y. \$2.25.

This *Guide*, a complete revision of one published in 1955, is designed to help a community health study committee or council to survey systematically community health needs and resources so as to formulate plans for health programs and services. Such a survey requires the active participation of local public, voluntary, professional, and service groups. The 7 sections follow the functions of an adequate health program: community profile and resources; maternal and child health (including care of handicapped children); health of school age children; health of the adult (including chronic disease and rehabilitation); control of infections; environmental health; and mental health (including programs for the mental patient and the aged).

As a manual, the guide is prepared in 3 columns. The first column raises questions to be answered on "Our Community Situation;" the second column offers information on "Recommended Standards and Objectives;" and the third part provides work sheets for recording community needs and functions, as well as plans of action.

This guide is the first of three to be prepared by the Committee on Public Health Administration of the APHA. The second, *Administration of Community Health Services*, will be published in 1961 by the International City Managers' Association, 1313 E. 60th St., Chicago 37, Ill. *Indices for Community Health Services*, for professional appraisal of community health programs, will be issued by APHA, also in 1961.

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Homemaker Services in the United States; Report of the 1959 Conference

By: U. S. Public Health Service (Division of Public Health Methods)

1960. 257 p. figs., tabs., forms. (*Public Health Serv.*

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publ. no. 746) Paperbound. Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C. \$1.25.

Statements of the preconference and Conference discussion groups provide the nucleus of the report of the 1959 National Conference on Homemaker Services, held in Chicago. The text is an elaboration of the 37 conclusions and recommendations approved. Speeches presented at the Conference that are included are: The needs of individuals and families for homemaker services, Katherine B. Oettinger.—Health-welfare partnership, David E. Price.—Homemaker service; an illustration of inadequacy, Sol Morton Isaac.—Homemaker services in Europe, Nora P. Johnson. The first five chapters of Part I offer information on the origin and development of homemaker services under social agencies and the role of such services in conjunction with health services. Administrative aspects of local and state planning, personnel policies, and financing were also considered.

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International Co-Operation for Social Welfare—A New Reality

Edited by: Hertha Kraus (Special editor)

1960. 222 p. (*Annals Am. Acad. Political and Social Science*. May, 1960. vol. 329) American Academy of Political and Social Science, 3937 Chestnut St., Philadelphia 4, Pa. \$2.00, paperbound; \$3.00, cloth.

The series of articles by highly qualified authors, appearing in this issue of the *Annals*, provides, in the words of Dr. Kraus, a "balanced introduction to this complex, challenging field, which is still at an early stage of development." Such international action focused on major social problems affecting the common man has involved many levels of government and many types of agencies, both national and international. Sections covering the background of world-wide needs, channels for co-operative action, programs in operation, and the outlook and goals review the various approaches to human welfare through concerted action. Of special interest is "New resources for rehabilitation and health," by Donald V. Wilson and Dr. Howard A. Rusk, discussing the expanded programs of international organizations, both voluntary and governmental, working to improve health and rehabilitation services for the handicapped.

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The Pastor and Community Resources

By: Charles F. Kemp, Ph.D.

1960. 96 p. Paperbound. Spiral binding. Published for the Department of Social Welfare, National Council

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of the Churches of Christ in the U.S.A., by the Bethany Press, Box 179, St. Louis 66, Mo. \$1.50.

Prepared for the use of clergymen of any denomination, this guide contains a statement of basic principles in regard to the pastor's relationship with social agencies and other professional workers and information on resources in the community that the pastor might use in dealing with human need. Section II, under problem areas arranged alphabetically, discusses in general terms community resources and how the pastor can make the best use of their services in behalf of those seeking aid through him. Brief attention is given to services for the handicapped, the aged, mentally retarded, and mentally ill. Section III is a directory of national resources—church-related, government, and voluntary. Space is provided at the back of the guide for the pastor's personal desk directory of local resources. Dr. Kemp is also author of *The Church: The Gifted and the Retarded Child*.

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Socio-Economic Rehabilitation of Former Mental Patients; A Research Project . . .

By: Research Unit, Manhattan Aftercare Clinic, New York City (Else B. Kris, M.A., M.D., Project Director)

1960. 125 p. tabs., forms. (*Off. of Vocational Rehabilitation grant no. SP-176*) Mimeo. Looseleaf. Available from Dr. Else B. Kris, Aftercare Clinic, 2 W. 13th St., New York 11, N.Y.

In this final report of a three-year study of former mental patients returned to the community, factors that make their rehabilitation difficult are explored. A total of 150 unselected patients, two-thirds of whom were women, was seen in the Research Unit of the Clinic for periods varying from one to three years. Family adjustment, duration of hospitalization, or diagnosis provided no apparent clue to successful rehabilitation. Organized activity, such as workshop placement immediately following release of patients from the institution, appears to be greatly needed, as well as increased homemaker services. The first interim report of the study, published in 1958 and annotated in *Rehab Lit.*, Sept., 1958, #1065, discussed findings of the first year's study.

Invitation to Research Directors

Research Reports

REHABILITATION LITERATURE is interested in publishing brief reports of research studies that its readers will find significant and interesting. The report should describe briefly the procedures for the study and give an account of the findings.

For the report to be printed as a one-page article, it should be 750-1,000 words in length. The manuscript should be typed double space. The editor asks that the report be accompanied by information that will identify the author and the research project. Information needed includes the author's professional qualifications, his relationship to the project and information as to sponsorship and support, if any, of the research project. If the brief report is a condensation or summary of a more extended report, a copy of the full report should be submitted for the editorial files of *Rehabilitation Literature*.

Article of the Month

On page 274 of the September, 1959, issue of *Rehabilitation Literature* will be found information concerning manuscripts to be submitted as an "Article of the Month," a full length article to be featured in *Rehabilitation Literature*.

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

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Is Premedication Necessary for Handicapped Children?

By: Albert Green, D.D.S., and Mark J. Mendelsohn, D.D.S. (c/o Dental Guidance Council for Cerebral Palsy, 70 Fifth Ave., New York 11, N.Y.)

In: *J. Dentistry for Children*. First Quarter, 1960, p. 40-45.

A STUDY was conducted from September, 1956, to June, 1957, to test several pharmacologic agents for premedication in the dental treatment of handicapped children. It was felt that anxieties, tensions, and apprehension might lessen or be eliminated with premedication, facilitating treatment. Much has been written of the values of medication and the powerful placebo effects, pharmacologic and toxic, of both drug and placebo. Wolf pointed out that reactions to placebos depend on the patient's conviction that a certain effect would result and stated that the threshold for pain may be greatly raised by suggestion.

The drugs selected for this study were sodium seconal, pentobarbital sodium, scopolamine hydrobromide, meperidine, and reserpine, administered alone or combined, in dosages depending on individual requirements. Eighty-five patients were included in the study, 74 with spastic, athetoid, ataxic, and mixed types of cerebral palsy, the remainder with other handicapping conditions. Eighty-three were children, aged 3 to 16 years; one adult was 19 and the other 23 years old. Twenty-two institutionalized patients were treated at the House of St. Giles, Garden City, N.Y., and the rest at the Cerebral Palsy Dental Clinic, Columbia University School of Dental and Oral Surgery. Some of those with cerebral palsy also were mentally retarded, aphasic, deaf, or blind, or had seizures. One was epileptic. One had congenital heart disease. Almost all had emotional problems.

All patients were seen for routine dental care. The children were educated to accept and participate actively in the dental treatment. During three visits, evaluation was done to determine the need for premedication, type, and dosage. Investigators tried to establish warm relationships and rapport with all patients and with parents when present. At the first visit, a thorough history and preliminary examination were made, with pertinent data on extent of involvement of cerebral palsy, limb control, and

physical and mental signs obtained. When feasible a brief intraoral examination was done.

At the second visit any data lacking in the history were obtained, a roentgenographic examination was made, and technics were adapted to individual needs. Full mouth intraoral series were done when feasible, as were bite-wings, occlusal films, and lateral plates.

At the third visit, diagnosis, planning of treatment, and prophylaxis were completed. A complete oral examination, with the aid of roentgenograms, and prophylaxis, using a revolving rubber cup and dental engine, were performed. The child's sensitiveness to pain was determined, by the doctor's pressing his thumb against the tip of the mastoid bone and then slipping the finger forward and pushing against the styloid process. Pressure on the normal mastoid bone causes no pain. (Rubbing the bone will evoke pain due to irritation of the periosteum.) Pressure in the direction of the styloid process is more or less painful depending on the individual's threshold.

At later visits, the routine dental care was completed. When indicated, a drug or combination of drugs was administered.

The use of drugs was indicated in only seven patients. This was attributed to the successful use of normal pedodontic principles. All conditions normally encountered were treated routinely, with or without local anesthetics, according to need. Of a group of 28 athetoid patients, 3 were given premedication. In one of these kinetic movements were noticeably reduced. No significant changes in behavior were seen in any others receiving premedication. Two patients unmanageable originally were unmanageable with medication and were referred for general anesthesia. Larger doses would have induced ambulatory somnolence in them.

The study revealed that, with gradual conditioning and learning by patients and continued kindness and understanding together with firmness on the part of the operator, even severely involved athetoid patients can achieve that degree of relaxation and co-operation needed for successful dental therapy without premedication. In a study reported elsewhere premedication in a six-year-old mentally defective mongolian idiot served only to dull further any slight vestiges of understanding; on three later visits he was handled successfully without medication but with reassuring treatment. In the handicapped the emo-

tional reactions may be more important than the physical.

Careful application of sound pedodontic patient management principles reduces significantly the need for chemical premedication. Drugs, if effective, should be used primarily to establish rapport between doctor and patient. Heavy doses eliminate this possibility by dulling a patient's responses and the same management problems arise each time the child requires dental treatment. With understanding and interest extended to him, the child can develop self-reliance and confidence in being able to accept dental procedures in a relaxed and co-operative attitude.

The Journal of Dentistry for Children is published quarterly by the American Society of Dentistry for Children, Mt. Royal and Guilford Aves., Baltimore 2, Md.

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Vocational Guidance for Crippled Children; A Positive Force in Future Job Training and Placement

By: William M. Usdane, Ph.D.

From: Paper presented at National Rehabilitation Association Conference, Boston, Mass., Oct. 26, 1959.

THERE HAVE BEEN many definitions of guidance, but, as a positive force in future job training and placement, it appears to have several basic underlying assumptions:

- Guidance is the organization of information by the school about the child and his community to help the child learn to make wise decisions concerning his own future.
- Guidance is the organization of life experiences within the school situation so the child is provided with situations in which he feels completely accepted, in which he can "take stock" of his potentialities, accept his limitations without threat, and develop a realistic picture of himself and the world around him.
- Guidance is the provision for satisfactory group experiences in which successful leadership and membership roles are learned and in which the group is able to set goals and solve problems dealing with interpersonal relations.
- Guidance is the provision of opportunities for the child to understand and value his uniqueness and his relatedness to others.

Accepted by most guidance and counseling personnel and understood to be necessary for the fulfillment of the crippled child's education, these concepts are rarely included in the curriculum as positive forces leading to future job training and placement. High on the priority lists of state committees reporting in preparation for the 1960 White House Conference on Children and Youth were: the rehabilitation and education of all kinds of

handicapped children; the expansion of employment opportunities for middle adolescents; and improved guidance services and vocational training, especially for those dropping out of school. These reflect two major concerns in counseling and guidance: the handicapped child must be prepared to deal adequately in interpersonal relationships with other workers, the boss, the personnel interviewer, and the consumers; he must be adequately trained in abilities and skills to sustain interest in his work. Both these needs must start to be met in elementary school and must be reinforced and broadened at the secondary level. It is too late to wait until the young adult is referred to the state vocational rehabilitation office.

Since 1954 and the passage of Public Law 565 and the underwriting of evaluation and training in private agencies, the state-federal program has tried to do its part. Not so, the schools. There is still "riding in all directions" effort by most schools dealing with the young handicapped adult during his last year at school. And most of this effort is spent in attempting to point the vocational finger of shame at the state vocational rehabilitation counselor. If committee meetings concerned with referral from school to the state vocational rehabilitation office were more constructively related to providing vocational guidance starting on the elementary level, we might see a more positive force operating for the crippled.

There must first of all be exposure to vocational guidance starting in the first grade, with increased vocational experience both in and out of school until graduation. Schools either assign responsibility for guidance of the crippled child to outside school resources or assign this function to specialists in guidance within the school. I subscribe unequivocally to the developing widespread belief that the only person who can be continuously and continually effective as a guidance worker is the classroom teacher. Certainly sending the crippled child for guidance from someone other than the classroom teacher appears too much like sending a child to the principal's office for disciplinary reasons.

School guidance personnel and the state rehabilitation counselor are forever picking up the vocational pieces of the crippled child. Guidance as a positive force must increasingly become preventive in a program at the teacher's level. The great responsibility for effective guidance should be in the classroom. The specialist, in school or community, will then be able to work effectively with additional, reinforcing types of help and vocational assistance.

Teachers must have understanding of human behavior to work positively with the crippled child and the multiprofessional rehabilitation team and must be acquainted with their different languages, their significant insights. The teacher is more often in the most significant position to relate positively with all the many professional

disciplines interested in the developmental aspects of the child. But so far as a positive force in future job training and placement, the teacher has been relegated by the field of rehabilitation to the position of a second-class citizen.

The teacher must serve as a front-line counselor. Although the teacher is limited by the nature of his other responsibilities and time available for individual conferences, group work and individual counseling in the classroom are proceeding virtually side by side and complementing each other. The teacher will find occupational information appropriate and necessary in both group work and individual counseling. The crippled child needs time and help in translating a knowledge of the world of work and job opportunities into personal terms. In counseling offering such help, individual vocational goals may be defined.

Data from standardized tests given by the school psychologist can be useful only insofar as the crippled child can incorporate them into his "self system." These data should be made available for him to react to and not used to challenge his self-concepts. It is suggested that they be used only when the student seeks the information and whatever interpretation occurs should be done without the teacher-counselor making judgments or decisions. Test results can be misleading and are subject to change.

The teacher should be a reality figure, representing society and its expectations. The teacher who is a student of human behavior and who attempts to work as an enabler *does not* have to have his role ambiguous or confused. He does not switch from "disciplinarian" to "counselor," from "friend" to "professional." There is a consistency of role and behavior on his part, because his roles as a teacher and a counselor are the same, for the goals of both are the same. I fail to see how there can be any difference, such as teaching being concerned only with intellectual processes and counseling with emotional processes. Both must be concerned with the whole person in his dynamic interaction with his world and the world about him.

The specialist personnel have a lack of regard for the counselor role of the teacher, perceiving the teacher's role really as that of a second-class professional person rather than a professional person playing a vital role in aiding the child. Also the teacher finds that the specialist's report too often sees the handicapped child from a one-to-one relationship without bringing insights to the teacher about the role of the child in the group and without effective recommendations in this regard.

But how to afford a concentration of reality reinforcement for the crippled child whose world has been bounded by physical and occupational therapists, home teaching in part, and the need for special class instruction! All seem to reinforce his uniqueness in a negative fashion. California recently passed Senate Bill 672 dealing with the

education of physically and mentally handicapped minors through work experience in sheltered workshops. The State Board of Education may adopt rules governing the establishing and conduct of programs for preparing physically handicapped and mentally retarded minors enrolled in special day classes for suitable occupations. This provides for the handicapped child who is unable to profit by education in work experience as provided for regular students. School districts and county superintendents may contract for the required services with sheltered workshops and other work establishments approved for supervised occupational training of these minors and reimburse them for expenses. Some other states have similar plans.

In Detroit the teacher of the multiply handicapped is provided with an outline of five steps in occupational education. It is not implied that each step is discrete and unrelated to the others. The child 1) learns to understand the relationships among different types of jobs, 2) learns to measure his qualifications against particular jobs, 3) learns the nonmanual and manual skills necessary for vocational adjustment, 4) is aided in job seeking and job readiness, and 5) is helped to adjust while on the job and in the working world.

Learning takes place more readily if the crippled child accepts as useful and important to him the activities in which he is expected to engage. First-hand experience makes a deeper impression than does vicarious. Observing business and industrial firms is important as a beginning, but the child must experience personally the goals and expectations of the world of work for himself.

A resource room within the school could be based on the technics and experiences of several of the Office of Vocational Rehabilitation projects concerned with work evaluation and work training. Here, in one room, there could be a variety of work samples based on the opportunities in the surrounding community. The teacher could be closely involved following up the suggestions of the work evaluator in the classroom with specialized attempts individually geared to close the gaps that appear as vocational inadequacies in the realities posed in the prevocational resource room.

This resource room could provide a meeting ground for the school and the local Chamber of Commerce representatives of business and industry. For the junior high school child this realistic laboratory setting could offer many advantages:

Elementary teachers could appropriately prepare their handicapped youngsters with essentials of the working world: making change, telling time, using a telephone, understanding numbers, completing a simple application blank, being aware of the working day and need for being on time. Does the child seek constant reinstruction or constant reassurance, does he appeal for constant praise and attention, is he variable in his relationships with

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other students, does he resent supervision or instruction, does he seek help when needed, does he utilize criticism constructively?

The resource room could afford a group setting with each person working at different tasks to allow for a supportive environment, dissipating the competitive aspects at first to establish the milieu of merely the world and the nature of job demands. The teacher could visit the plants and businesses from which the work samples are drawn and obtain a clear picture of the nature of the work and the demands of the situation. The state vocational rehabilitation counselor could view the possible candidates for his services in an easy transition from school to further training or appropriate placement. The school psychologist and social worker could view the resource vocational room as a laboratory for confirmation or enlargement of the results obtained from his work with the child. The parents would be afforded a realistic look at their child, dissipating any fantasy goals that may have limited the youngster in working out his own vocational planning.

561

Facilities for the Aging and Infirm

By: Clinton H. Cowgill, F.A.I.A. (*Head, Department of Office Practice, American Institute of Architects*)

In: *AIA Journal*. May, 1960. 30:5:63-72. Floor plans.

IN THE DESIGN of public buildings the safety of the aged and infirm should be kept in mind. Competent architects take as a matter of course precautions provided for by building codes. Additional precautions that should be considered for the handicapped able to walk include: clearly marked directions, nonskid walks and floors, high level of illumination, avoidance of crowding, even walking surfaces, no booby traps, no curbs at street crossings, and facilities for melting ice and snow at entrances. For those confined to wheel chairs, the following should be kept in mind: electric switches, elevator signals, and automatic elevator controls within reach; corridors not less than 8 ft. wide; doors from 3 to 3½ ft. wide with electronic control or other operating devices; ramps no steeper than 8 percent, 2 ft. 5 in. between curbs, with hand rails; no steps in essential circulation area; and toilet stalls 3½ ft. wide.

Since two-thirds of oldsters live in cities, leadership in suitable housing should be taken by urban agencies. Even with services of visiting nurses and housekeepers, maintaining a person in his own home is much less expensive than in a nursing home or hospital. Many older people, especially women, prefer remaining in the home in which they raised their families to other arrangements. Home ownership represents financial security but may be a burden financially and physically. Often old houses be-

come dilapidated. In homes rented and not owned by the aged, deterioration is more rapid and they become hazardous.

For most older persons, owning a home meeting their needs is out of the question and rents for new homes are often out of sight. More rental housing for the aged is needed and may be economically feasible without a subsidy since space needs for oldsters are less than for young families. With encouragement from the Federal Housing Administration, builders should be led to include dwelling units for older people in their plans. These units should be in continued demand. Also in public housing programs the needs of the lower-income group should be considered. The growing over-65 age groups are now less well housed than any other group. Ninety-seven percent of old people want to live in their own homes.

The oldsters' house should be suitable both for relatively healthy persons and for persons with varying degrees of infirmity. At the extreme, the following units would be desirable:

- bedroom with two single beds, with 4 ft. between (for turning wheel chairs) and 3 ft. between each bed and wall, and with night tables, reading lamps, dressers, and chairs (including an easy chair)
- living room with wide opening into bedroom
- kitchen and dining space in either kitchen or living room
- bathroom arranged for use of a wheel chair
- utility room with space for automatic washer, heater, hot water tank, and possibly air conditioner
- housekeeper's room (may first be used as guest room)
- hobby room
- carport with landing at car floor height

If relatives live in the same community, the oldsters' home should be at a convenient distance. It should be near public transportation facilities, shopping center, church, and other points of interest to the retiree.

If oldsters and a son or daughter's family live in separate apartments under the same roof, each is provided needed privacy and the younger family can look after the older. In one plan for the older persons' portion of a two-story scheme, a movable partition between living room and bedroom can be adjusted so that the bedroom is larger than for a single person. The same plans used for a two-story house could be used as a row house, a semidetached house, or a detached house. Although units of semidetached or row houses may be purchased separately, detached houses are preferred by most speculative builders and by many purchasers in spite of the waste in land use. For rental housing the row house is most economical in land use and to build.

Other types of rental housing for the aged include walk-ups (ground floor only) and high-rise apartment

buildings, for with elevators any floor is suitable. In row and apartment houses, dwelling units for old and young should be intermingled. Old people should not become isolated from life around them but feel more self-reliant with contemporaries. Many older people enjoy trailer life and trailer camps, sometimes settling in a camp with utility connections, bathing and toilet facilities, and laundry equipment, with communal elements such as a general purpose room for meetings, movies, games, and a snack bar and space for outdoor games. A permanent community might logically be built along these lines without the disadvantages of trailer camps.

Another possibility is converting a no longer popular commercial hotel or large private house into a rooming place for oldsters, or a club could be formed for the aged with living accommodations. A housing project for older persons in England offers the following advice:

- secure a competent person to oversee the operation
- work with health and welfare authorities and relatives of tenants
- form a panel of persons who may be called upon to care temporarily for sick tenants awaiting hospital admission
- provide safety devices and take precautions

A dwelling for the aged, whether a remodeled house, self-help center, specially designed apartment, or detached house, should reflect some of the following:

- the building entrance should be at ground level, if possible. Otherwise a ramp should be constructed when needed, with grade not more than 5 percent (1 ft. in 20 ft.) and slip-proof surface
- for apartments above first floor, an automatic elevator large enough for cots should be available
- orientation providing some daily sunshine is important and in most places air conditioning is desirable
- higher winter room temperatures and increased general illumination is needed
- a protected sun terrace and small garden might be considered. Unless there is a caretaker, labor involved with a large garden may be worrisome
- crank-operated windows should be chosen that may be opened and closed by wheel chair residents
- corridors if required should be at least 3½ ft. wide and as short as possible
- doors should be omitted when not needed for privacy; in some cases a fixed screen may allow enough privacy
- doors should be 3 to 3½ ft. wide (without thresholds) and should be electric-eye operated, sliding or folding, or have hardware convenient for hand operation from a wheel chair
- all electric switches should be within reach of a wheel chair occupant
- open planning may give effect of spaciousness
- steps should generally be avoided
- stairs and corridors should have hand rails 30 in. above floor on both sides

- a desirable feature is a covered automobile entrance with platform the height of car's floor
- floors should be slip-proof
- bathroom should be large, arranged for convenient use by wheel chair patient
- a space 3 ft. wide should be at one side of the WC
- grab bars should be securely fastened over bathtub and wherever support is needed
- square bathtub with seat and shower may be preferred
- electric ranges are recommended and kitchen cupboards should be within easy reach

Not all the above precautions are needed when the elderly person is healthy, but an investment for later years should provide for additions. Grab bars and other devices not needed immediately may be depressing.

In general, the aged should be encouraged to take an honored place in community life and their segregation discouraged. By active participation those who are old chronologically may remain spiritually, mentally, and physically young and thus avoid becoming infirm.

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561A

The Disabled Living Research Unit

By: Margaret Agerholm, M.A., B.M., B.Ch. (Oxon)
Lecturer, Nuffield Department of Orthopaedic Surgery,
Nuffield Orthopaedic Centre, Oxford, England)

In: *Rehabilitation*. April-June, 1960. 33:33-36. Floor plan.

A DISABLED Living Research Unit, to be opened in May, 1960, has been constructed on the grounds of the Nuffield Orthopaedic Centre at Oxford. The building was erected with a donation of £51,000 from the National Fund for Research into Poliomyelitis and Other Crippling Diseases. Mr. Jobson of the Oxford Regional Hospital Board, which has been supporting the scheme, was the designer. For at least three years, the Unit will be personally directed by Professor Trueta, Nuffield professor of orthopaedic surgery, University of Oxford, in response to whose appeal the Fund made its donation.

The Unit's purpose is to study and solve problems of daily living encountered by severely disabled patients returning home from the hospital, frequently too disabled to enter ordinary retraining centres. The Unit offers concentrated experience, equipment, and technical services, allowing the disabled to assess and solve problems under supervision. A relative admitted with the most severely disabled can learn how best to help him.

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The Unit will accommodate 12 persons and 2 resident staff. A central entrance and waiting room opens into a day, a residential, and a flat wing. Most rooms open onto a paved surround.

The day wing is entered through the living (dining-sitting) area, with kitchen and utility room to the right. The kitchen and living area communicate by means of a hatch. Beyond both areas are the work assessment room first, the workshop, and at the end of the wing a carport. The kitchen will have both electric and gas cookers. Sinks, cookers, and other equipment can be adjusted in height, helpful in assessing the optimum position for the patient's home equipment. The utility room, similarly equipped, is for clothes-washing, ironing, shoe cleaning, and such. The work assessment area is for daytime activities, such as writing, telephoning, typing, sewing, carpentry, sweeping, and polishing, and for practising sitting down and standing up. In the workshop a skilled technician will design and modify "disabled" aids, handy for fittings and adjustments with the patients. In the assessment room he can observe specific disability with a view toward designing equipment of more general application. Throughout the day wing are overhead grids; disabled upper limbs can be suspended to find the optimum position for maximum efficiency and comfort.

The residential wing may be entered from the central entrance area through the men's or the women's corridor or the reception office, opening into the sister's office and interview room. Along each side of the wing are one single and two double rooms, entered from the corridors. In back of the offices, opening off the corridors, are three toilet rooms and two bathrooms with toilets. At the far end a sluice opens onto each corridor. In the patients' rooms "vanitory" units combine washbasin and dressing table, all adjustable in height and each with a swiveling mirror. Here patients can practise getting on and off bed and chair, dressing, and washing at their own pace and with staff advice when needed. In the bathrooms and toilets they can practise and try out different heights of equipment and the use of rails and hoists. Both baths and showers are provided.

The rehabilitation flat is for use of a severely disabled patient and relative who needs to learn how to care for him and how to choose from among various aids. A ring design of bathroom, bedroom, sitting room, and kitchen intercommunicating round a central hall, has been chosen as suitable whether husband, wife, or child is disabled.

Two conflicting principles were borne in mind in designing the Unit: Home conditions should be resembled as much as possible so the patient will be well adjusted to home living; incorporating the main difficulties of home life automatically excludes the very disabled who cannot adapt and, even after maximal rehabilitation, will need rehousing or extensive house modifications. The

compromise reached gives the Unit a marked "disabled" bias, and ordinary domestic housing difficulties will be on an "optional" basis.

At present the only stairs for practice are those leading to the warden's flat, over the rehabilitation flat. These are equipped with grab rails. Graded steps will be placed in the assessment area and outdoors in the concrete. Floors are nonslip and uncarpeted, but there will be a carpet in the sitting room for practice walking. Passageways and doorways are more than wide enough for wheel chair users, but narrower passages can be imitated with movable obstructions. Doors, door handles, and light switches will be easy but modifiable to the more difficult. The staff lavatory is a model of the narrow and awkward and will no doubt be used for practice by patients. The latest special bed designs for the disabled will be available but patients will be encouraged to graduate to standard beds and divans. Furniture throughout the Unit provides a wide variety of design so the patients can select for practice articles most like their own or decide from trial what to buy.

An experienced warden and "sister" will be resident staff. Nonresident will be a nurse, physiotherapist, and occupational therapist, supernumeraries from the Nuffield Orthopaedic Centre. A full-time technician will improve and design equipment. Social problems will be handled by the almoner of the Nuffield Orthopaedic Centre. Domestic help and a male porter will be needed for cleaning, lifting, and minor repairs. The Centre will provide basic services, laundry, meals (sent in a heated trolley), and engineers' servicing. Patients will assist as their degree of disability allows in housekeeping chores and occasionally meals, with food sent into the Unit. Activities they will concentrate on are those in which they need to develop skills, for they can spare neither time nor energy on nonessential exercising of skills already mastered.

Patients will be kept flowing through the Unit. Some may stay only a night or two to work out the solution to a particular problem or to try one range of equipment. Others will stay several weeks; a few with severe diffuse disabilities may stay longer. Those with poliomyelitis will have priority for admission, and the Centre's emergency electrical supply for respiratory aids has been extended. The defeat of poliomyelitis by the Salk vaccine and the Fund's expansion of its interest to other crippling diseases mean that the work can be broadened. The later development of the Unit is rightly left indefinite and will be determined by its work in the first years, the needs uncovered, and developments in medicine.

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Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book *Rehabilitation Literature 1950-1955*, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.

ACCIDENTS

562. Decker, Ruby (106 Marlin St., Galveston, Tex.)

Safe practices in the physical therapy department. *Phys. Therapy Rev.* June, 1960. 40:6:437-441.

Safe practices in the physical therapy department as they relate to the patient, physician, departmental staff, students, and hospital administrator are considered. Suggestions for immediate handling of, and for different methods of reporting, accidents are offered. Many specific ways for improving safety in the department are recommended.

563. Dervitz, Hyman L. (New York State Rehabilitation Hospital, West Haverstraw, N. Y.)

Safety; a factor in functional training phases of physical therapy, by Hyman L. Dervitz, Erbert F. Cicien, and Morton Hoberman. *Phys. Therapy Rev.* May, 1960. 40:5:357-368.

A detailed and extensively illustrated article concerning safety and safety education as it applies in functional training of the physically disabled patient and to the therapist engaged in teaching functional activities. Safety technics include those that safeguard the therapist and those that the therapist employs to safeguard the patient.

AMPUTATION—MEDICAL TREATMENT

564. Haslam, Edward T. (1430 Tulane Ave., New Orleans 12, La.)

Changing concepts in managing peripheral vascular amputees, by Edward T. Haslam, Russell Grunsten, and Jack Wickstrom. *J. La. State Med. Soc.* May, 1960. 112:5:178-182.

From the authors' experience, they believe it is possible to restore ambulation with a prosthesis in carefully selected patients with peripheral vascular disease when below-knee amputation is performed. Results in patients accepted for preprosthetic and prosthetic training at the Tulane University Rehabilitation Unit are evaluated. The need for careful evaluation of the individual before level of amputation is determined is emphasized. Dr. Alfons R. Altenberg (Monroe, La.) discussed this paper presented by Dr. Haslam at the 1959 annual meeting of the Louisiana State Medical Society.

APHASIA

565. Wood, Nancy E., comp.

Language development and language disorders; a compendium of lectures. Lafayette, Ind., Child Development Publications, 1960. 95 p. (*Monographs of the Soc. for Research in Child Development. Ser. no. 77, 1960. 25:3*)

Contains selected lectures from a symposium on language development and language disorders, presented in 1958 at the Cleveland Hearing and Speech Center as part of a new curriculum in language pathology at Western Reserve University. The course was designed for graduate students or professional persons working in the areas of aphasia, hearing loss, emotional disturbance, mental retardation and cerebral palsy.

Contents: Preface, Nancy E. Wood.—Language development, Dorothea McCarthy.—Language disorders in children, Nancy E. Wood.—Organic brain syndromes and speech disorders in children, Robert D. Mercer.—A neurologist discusses the evaluation of a nonverbal child, Lowell G. Lubic.—Autistic and symbiotic syndromes in children, Earl A. Loomis, Jr.—Psychologic assessment of the nonverbal child, Melvin E. Allerhand.—Language problems of the child with cerebral palsy, Margaret C. Lefevre.—Language development of the mentally retarded child, T. Ernest Newland.—When and what is aphasia, Jon Eisenson.

Available from Child Development Publications, Purdue University, Lafayette, Ind., at \$2.75 a copy.

APHASIA—DIAGNOSIS

566. Wilson, Lillian F. (Dr. Hirsh, 818 S. Kingshighway Blvd., St. Louis 10, Mo.)

Auditory discrimination learning by aphasic and non-aphasic children, by Lillian F. Wilson, Donald G. Doehring, and Ira J. Hirsh. *J. Speech and Hear. Research.* June, 1960. 3:2:130-137.

In same issue: Visual spatial memory in aphasic children, Donald G. Doehring. p. 138-149.

A report of an investigation that attempted to assess the ability of aphasic and nonaphasic children to discriminate among four sounds differing in respect to two acoustic dimensions and to associate each of the sounds with a different visual stimulus. Subjects were 14 children classified as sensory aphasic and 13 nonaphasic children. Six of the aphasic children failed to learn the task within the allotted number of trials; poor performance appeared to be the result of a specific difficulty in learning to associate the four visual stimuli with the four auditory stimuli. This paper is based on research conducted in connection with Miss Wilson's M.S. thesis.

Dr. Doehring (Indiana Univ. School of Medicine, Indianapolis, Ind.) reports on an experiment to determine whether children classified as aphasic are defective in certain nonverbal abilities related to visual memory. Results of comparison with performance of deaf and hearing children suggest that aphasic children are retarded in some, but not all, aspects of visual perceptual ability. See also 616.

ABSTRACTS

ARCHITECTURE (DOMESTIC)

See 561.

ARTHRITIS

567. Arthritis and Rheumatism Foundation

The arthritis hoax; \$250,000,000 in frauds and fallacies. New York, Public Affairs Committee, 1960. 20 p. (Public Affairs pam. no. 297)

Material in this public education pamphlet is based on *A Report on the Misrepresentation of Arthritis Drugs, Devices and Remedies in the United States*, which was prepared by Ruth Walrad for the Committee on Arthritis Advertising of the ARF.

Available from Public Affairs Committee, 22 E. 38th St., New York 16, N. Y. at 25¢ a copy. Quantity rates are offered.

AUDIOMETRIC TESTS

568. Haug, C. Olaf (10414 Cliffwood Dr., Houston 35, Tex.)

Hearing testing on the very young child; follow-up report on testing the hearing of 968 preschool patients with the Pediacoumeter, by C. Olaf Haug and Frederick R. Guilford. *Trans. Am. Acad. of Ophthalmology and Otolaryngology*. May-June, 1960. 64:3:269-271.

The authors are convinced that a child must be tested for his threshold of hearing pure tones for an accurate evaluation or diagnosis. With conventional audiometric technics, this means a delay until the child is 5 or 6 years of age. In testing 968 very young preschoolers with the Pediacoumeter, a solenoid-released jack-in-the-box device, results with 5-year-olds were successful in 96 percent (287 out of 298), with 4-year-olds, 94 percent (272 out of 287) and with 3-year-olds, 82 percent (187 out of 227). For 62 2-year-olds, percentage of success was 47.

BLIND

569. Norton, Fay-Tyler M. (Cleveland Soc. for the Blind, 1958 E. 93rd St., Cleveland 6, Ohio)

Training normal hearing to greater usefulness; a progress report. *New Outlook for the Blind*. June, 1960. 54:6:199-205.

The author, a research psychologist, is head of the hearing research project being conducted by the Cleveland Society for the Blind. Its purpose is to develop methods for training normal hearing of blind persons to greater usefulness. Dr. Norton discusses research procedure, experimental testing and training procedures, and some of the findings of the study. Her previous article on the project appeared in the Dec., 1959, issue of *New Outlook for the Blind* (see *Rehab. Lit.*, Feb., 1960, #91).

BLIND—EMPLOYMENT

570. Johnson, Carl A. (Cleveland Soc. for the Blind, 1958 E. 93rd St., Cleveland 6, Ohio)

Toward greater opportunities in business enterprises. *New Outlook for the Blind*. June, 1960. 54:6:215-218.

Describes the purpose of the American Business Council for the Blind, formerly the Midwest Council of Agencies for the Blind. Consideration of problems that must be

solved to achieve more uniform success in business enterprises (vending stands) for employable blind persons will be the main focus of the group. Although the Council is an unaffiliated organization, it has interests in common with the American Association for Workers with the Blind with which it hopes to develop a strong working relationship for improvement of vending stand operations.

BLIND—SOCIAL SERVICE

See 608.

BLIND—SPECIAL EDUCATION

See 581.

CEREBRAL PALSY—EQUIPMENT

571. Mary Lauretana, Mother (Joseph P. Kennedy, Jr., Memorial Hosp., Brighton 35, Mass.)

Head device for severely handicapped cerebral palsied child. *Cerebral Palsy Rev.* May-June, 1960. 21:3:6-8.

A description, with drawings, of a helmet to which reading, typing, feeding, and other aids can be attached. Designed for the severely athetotic child.

CEREBRAL PALSY—MEDICAL TREATMENT

572. Argy, William P. (Med. Director, D. C. Soc. for Crippled Children, 2800 13th St., N.W., Washington 9, D. C.)

Carisoprodol (Soma) muscle relaxant properties in children with cerebral palsy. *Georgetown Med. Bul.* May, 1960. 13:4:198-200.

Results of the use of carisoprodol with 22 severely handicapped children are reported. Relaxation was noted in most cases. Dr. Argy states that it is the most satisfactory muscle relaxant he has found at this time; while it does not eliminate the need for bracing or therapy, it does enhance the reactions to therapy.

573. Kabat, Herman (Miriam Hosp., 164 Summit Ave., Providence 6, R. I.)

Neuromuscular dysfunction and treatment in athetosis, by Herman Kabat and Margaret McLeod. *Conn. Med.* Nov., 1959. 23:11:710-713.

The very nature of deficiencies of voluntary motion observed in the athetoid patient points to a central defect of motor function. The authors suggest that relatively unchecked activity of the basal ganglia, resulting in isotonic predominance, may play a role in the inco-ordination shown by patients with cerebellar disorders. Results of using diphenyl hydantoin in the treatment of six patients with athetosis suggest the drug may be of value for improving voluntary motion and performance. The role of therapeutic exercises in athetosis is discussed.

574. Keats, Sidney (31 Lincoln Park, Newark, N. J.)

Surgery of the extremities in the treatment of cerebral palsy. *G.P.* June, 1960. 21:6:86-88.

Increased emphasis on the conservative management of cerebral palsy—by physical therapy, exercises, and braces—has caused misunderstanding concerning the use of surgery in the rehabilitation program. Surgical correction should be assessed for its possible contribution to the over-all program of treatment. It is now generally

conceded that surgery of the extremities is most successful in patients with cerebral spasticity. Its use in the athetoid and the spastic extremity is considered, as well as the importance of "timing" of the proposed surgery. Results of a comprehensive program for the treatment of cerebral palsy over a 10-year period at the New Jersey Orthopedic Hospital are discussed.

575. Phelps, Winthrop M. (3038 St. Paul St., Baltimore 18, Md.)

Trial of "Soma"—*Spastics' Quart.*, 9:1:34. *Spastics' Quart.* June, 1960. 9:2:24-26.

Reply to Dr. Phelps by R. S. Illingworth, p. 26.

Dr. Phelps' letter is in regard to an article by Prof. R. S. Illingworth, published in a previous issue of *Spastics' Quarterly* (see *Rehab. Lit.*, May, 1960, #335). Dr. Phelps disagrees with Illingworth's statement that the drug exerted no beneficial effect. His experience indicates the drug "certainly has a place in the treatment of cerebral palsy." Differences in experimental testing methods here and in England may be responsible for the controversial opinions.

576. Sterling, Harold M. (Joseph P. Kennedy, Jr., Memorial Hosp., Brighton 35, Mass.)

Muscle relaxants in cerebral palsy; a comparative study. II. Chlorophenylmethylthiazanone sulfone (Trancopal). *Arch. Phys. Med. and Rehab.* June, 1960. 41:6:226-228.

The second in Dr. Sterling's reports on various drugs used in the treatment of cerebral palsy (for first, see *Rehab. Lit.*, July, 1960, #503). Four children between the ages of 2 and 4 years, having spasticity, athetosis, or both, affecting the control of the upper extremities, were given Trancopal three times a day for six weeks. Three children similarly impaired received a placebo. Those receiving the drug failed to show any significant change that could be attributed to a drug effect. A specially selected test designed to show possible improvement in rate of manual manipulation was used to evaluate performance.

CEREBRAL PALSY—MENTAL HYGIENE

577. Lubin, Bernard (Dept. of Psychiatry, Indiana Univ. Medical Center, Indianapolis, Ind.)

A counseling program with adult, male cerebral palsied patients, by Bernard Lubin and Anita Slominski. *Cerebral Palsy Rev.* Mar-Apr., 1960. 21:2:3-5, 11.

A program of individual and group counseling with adult, male cerebral palsied patients was conducted at the Cerebral Palsy Clinic of the Indiana University Medical Center in an attempt to determine the feasibility and need for both methods of counseling. The group situation appeared to be more effective than individual counseling. The experiment indicated a need for concurrent counseling sessions with parents of the cerebral palsied patients. Problems of both patients and parents, as change was facilitated in the patients, are discussed.

CEREBRAL PALSY—PSYCHOLOGICAL TESTS

578. Mehl, Marie C. (University of Miami, Coral Gables, Fla.)

Philosophical implications of evaluating the cerebral

palsied. *Cerebral Palsy Rev.* Mar.-Apr., 1960. 21:2:6-9.

In same issue: Evaluation of the cerebral palsied and straw issues, Robert M. Allen, p. 9-10.

A review of the literature from 1930 to the present date led the author to accept a mechanistic viewpoint where psychological evaluation of the cerebral palsied patient is concerned; she perceives a distinct rationale and underlying philosophy in the theories formulated by the various writers in the field. Dr. Allen's paper, following the article, discusses selected aspects of Mehl's point of view. He grants the necessity for publishing Mehl's paper, since it traces adequately the growth of the psychological examiner in terms of attitudinal changes toward evaluation of the cerebral palsied, but warns of the danger that might arise in demanding that the cerebral palsied be assessed on tests standardized solely on a cerebral palsied population. Dr. Allen is professor of psychology at the University of Miami and consultant to United Cerebral Palsy of Miami Rehabilitation Center.

CEREBRAL PALSY—SOCIAL SERVICE

See 614.

CEREBRAL PALSY—SPECIAL EDUCATION

579. Davies, H. B. (Thomas Delarue School, Tonbridge, Kent, England)

Relative factors which render the child capable or incapable of benefiting from formal education. *Special Education.* May, 1960. 49:3:16-19.

In this talk given at a meeting of the Medical and Educational Advisory Committees of the National Spastics Society and the British Council for the Welfare of Spastics, Mr. Davies, headmaster of a special school, discussed the relative importance of innate intelligence, motivation to learn, individual instruction in the basic subjects, and adequate therapy to overcome physical limitations. Even when all these factors are operating, formal education of the cerebral palsied child is complicated by the learning difficulties these children experience. Mr. Davies points out areas where teachers would welcome help from medical and educational advisory committees.

580. *Spastics' Quart.* June, 1960. 9:2.

Partial contents: The "secondary modern" group in an all age school for cerebral palsied children, Edith M. Caldwell, p. 4-10.—An experiment in secondary education for c.p. children of good intelligence, H. B. Davies, p. 11-17.—Vocational guidance for spastics, J. S. Coventry, p. 18-23.

Miss Caldwell (Percy Hedley School for Spastic Children, Newcastle-upon-Tyne, England) discusses the introduction of secondary modern school methods in a small special school for the cerebral palsied to further the mental, social, and emotional development of children in the 12-to-16 age range.

Mr. Davies (Thomas Delarue School, Tonbridge, Kent, England) discusses organization of school population and curriculum for the cerebral palsied at the secondary school level. Activities included and results of training are discussed.

Mr. Coventry, a youth employment officer, points out the need for close co-operation among agencies knowing the spastic client, if vocational guidance is to succeed.

ABSTRACTS

The counselor should avoid quick negative decisions; it is suggested that assessment might better follow training since results are often surprising. Educational assessment should be reviewed regularly. Some statistics on types of jobs held by those working in open employment are included.

CEREBRAL PALSY—SPEECH CORRECTION

See 616.

CLEFT PALATE

See p. 246.

COLLEGES AND UNIVERSITIES

581. McGill, William O. (*Chicago Lighthouse for the Blind*, 1850 W. Roosevelt Rd., Chicago 8, Ill.)

Helping blind students to prepare for college, by William O. McGill and Edith Frish. *New Outlook for the Blind*. June, 1960. 54:6:219-221.

Describes a college preparatory program conducted by Chicago Lighthouse for the Blind during the summer of 1959. Activities were planned to aid the blind students in understanding college procedures, efficient study habits, and personal-social development. The two-week program held in 1959 will be expanded during the summer of 1960.

COLOSTOMY

582. Stahlgren, LeRoy H. (133 S. 36th St., Philadelphia 4, Pa.)

What is the effect on sexual function of resection of the rectum for ulcerative colitis? by LeRoy H. Stahlgren and L. Kraeer Ferguson. *Ileostomy Quart.* Spring, 1960. 4:2:11, 27.

Sixty patients (25 male, 35 female) who had undergone resection of the rectum during the past 10 years were studied. Only patients who were at least one year post-operative were included so that temporary effects of operative stress and mental and physical adjustment would be eliminated. Findings indicate that it is unlikely that men and women in the sexually active years will notice any alteration in sexual function after rectal resection for ulcerative colitis.

CONGENITAL DEFECT

See 550.

DEAF—PSYCHOLOGICAL TESTS

583. Brill, Richard G. (*California School for the Deaf*, Riverside, Calif.)

A study in adjustment of 3 groups of deaf children. *Exceptional Children*. May, 1960. 26:9:464-466, 470.

Subjects of this study were divided into groups composed of children with deaf parents, children with deaf siblings but hearing parents, and deaf children from families with no history of rubella or deaf relatives. There were no statistically significant differences in the ratings of the three groups taken as a whole. However, groups of children with deaf parents and with deaf siblings had more ratings at both extremes than the group of

children who were the single deaf person in the family. The adjustment of children with deaf parents was observed to be no better than that of deaf children with hearing parents whether they had deaf siblings or not. It is implied that this may be so because of lack of adjustment on the part of an unusual number of these deaf parents.

584. Rosenstein, Joseph (*Central Institute for the Deaf*, 818 S. Kingshighway Blvd., St. Louis 10, Mo.)

Cognitive abilities of deaf children. *J. Speech and Hear. Research*. June, 1960. 3:2:108-119.

Cognitive ability of 60 deaf and 60 hearing children was tested by administering three nonverbal visually presented tasks. Results indicated no statistically significant differences between deaf and hearing children in ability to perceive, abstract, or generalize, nor were differences observed between deaf and hearing in the tasks used here, where the language involved is within the capacity of the deaf children. Conceptual deficit, where previously reported, may have been due to the use of tasks involving linguistic abilities beyond those of the deaf children tested.

DEAF—RESEARCH

585. Gallaudet College (Washington 2, D. C.)

Research facilities for the deaf in the United States, prepared by the staff of the *American Annals of the Deaf* . . . for the participants in the Workshop on Identification of Researchable Vocational Rehabilitation Problems of the Deaf. *Am. Annals of the Deaf*. May, 1960. 105:3:271-311.

This entire issue was prepared for the use of participants at the workshop being held at the College June 19-22, 1960. The paper "Psychiatric-preventive and socio-genetic study of the adjustive capacities, optimum work potentials and total family problems of literate deaf adolescents and adults," by Edna S. Levine, is followed by a series of statements describing research facilities at the Central Institute for the Deaf, Northwestern University, John Tracy Clinic, the library of the Alexander Graham Bell Association for the Deaf, the Clarke School for the Deaf and its library, and Gallaudet College and its library and the National Index on Deafness, Speech, and Hearing.

Available as a reprint at \$1.50 a copy.

DEAF—SPECIAL EDUCATION—U.S.S.R.

586. Morkovin, Boris V. (881 S. Bronson Ave., Los Angeles 5, Calif.)

Experiment in teaching deaf preschool children in the Soviet Union. *Volta Rev.* June, 1960. 62:6:260-268.

This article is part of the author's study *Research Work of the Moscow Institute of Defectology*, supported by the National Institutes of Health, which can be obtained from the author. The three-year experimental program of the Moscow Institute is described in some detail in this article. The author does not share the optimism of the experimenters N. G. Morozova and B. D. Korsunskaja in the initial use of finger spelling as a stepping stone to oral language, especially as applied to the nonphonetic English language.

DEAF-BLIND

587. Root, Ferne K. (*Center for the Development of Blind Children, Syracuse University, Syracuse, N. Y.*)

Study of deaf-blind children; a developmental plan, by Ferne K. Root and Betty G. Riley. *New Outlook for the Blind*. June, 1960. 54:6:206-210.

Mrs. Root, co-ordinator of the Center for the Development of Blind Children, describes the work of the diagnostic clinic set up within the Center, its staff, and its method of working with local agencies when the child returns home. A summary of one deaf-blind child's visit to the Center illustrates aspects of the diagnostic program in action.

DENTAL SERVICE

See 559.

DWARFISM

See 550.

EXERCISE

588. Tipton, C. M. (*Coll. of Agriculture, Univ. of Illinois, Urbana*)

The Rotometer and its use by disabled students, by C. M. Tipton and D. M. Hall. *J. Assn. for Phys. and Mental Rehab.* May-June, 1960. 14:3:72-73, 81.

Describes an exercise machine designed in accordance with the principles of the Prony brake. The methods for testing the machine and its usefulness in reconditioning disabled students are reported.

FRACTURES

See 553.

HEALTH SERVICES—SURVEYS

See 554.

HEMIPLEGIA

589. Sadka, Mercy

The rehabilitation of the hemiplegic patient. *Australian J. Physiotherapy*. Mar., 1960. 6:1:19-23.

In same issue: The role of occupational therapy in the rehabilitation of the hemiplegic patient, Frank P. Dargan. p. 23-26.

The physical therapist bears the brunt of effort in rehabilitation of the hemiplegic patient. The therapist must understand the neurological state, apart from hemiplegia, to manage the patient sensibly. Since cerebrovascular disease is rarely a disease of the young, one frequently deals with problems of respiratory insufficiency, heart failure, diabetes, osteoarthritis, obesity, and malnutrition. Retraining activities supervised by the physical therapist are briefly reviewed.

In the second article, Mr. Dargan briefly reviews the occupational therapist's role in social and recreational activities provided the patient, provision of self-help devices for personal and household use, and prevocational rehabilitation.

HEMIPLEGIA—NURSING CARE

590. Turner, Gwendolyn E. (*Visiting Nurse Assn. of Brooklyn, 138 S. Oxford St., Brooklyn 17, N. Y.*)

The cerebral vascular accident patient. *Nursing Outlook*. June, 1960. 8:6:326-330.

Home care of the hemiplegic patient must be planned on an individual basis; the public health nurse works as a member of the rehabilitation team and demonstrates to members of the family and the patient the activities to be used to promote recovery. Discussed are the physical environment and adaptations for proper care of the patient, physical therapy measures and equipment needed, an activities of daily living chart, and how the nurse can aid in speech therapy for the aphasic patient. The public health nurse holds the key position to the patient's ultimate recovery. The author is assistant supervisor with the Visiting Nurse Association of Brooklyn, serving in the capacity of registered nurse-physical therapist advisor.

HOMEBOUND—MEDICAL TREATMENT

591. Sonkin, Lawrence S. (*525 E. 68th St., New York 21, N. Y.*)

Home care in medical education; a preliminary assessment of the Cornell Home Care Program. *J. Med. Education*. June, 1960. 35:6:465-510.

A report describing and evaluating experiences at the New York Hospital-Cornell Medical Center with a home care program designed to give fourth-year medical students opportunity to learn firsthand the value of such programs. Activities of the program during its first two years as an organized section of the Comprehensive Care and Teaching Program are evaluated. Sections of the report discuss opportunities for learning, attitudes of students toward home care, and the feasibility of home care for other medical schools. A follow-up report on the program from 1955 to 1960, by Dr. F. T. Kirkham, is included, as well as a report, in the appendix, on cost of operating the program, by Dr. Peter Rogatz.

HOMEBOUND—PROGRAMS

See 555.

HOMEBOUND—SPECIAL EDUCATION

592. London County Council (Gr. Brit.)

Report on Joint Conference under the auspices of the . . . and the British Council for Rehabilitation on the subject of: Home teaching of the handicapped. *Rehabilitation*. Apr.-June, 1960. 33:5-11, 13-19, 21-25, 29-32.

Types of patients served, subjects taught, general teaching methods employed, and special problems encountered in home teaching of the handicapped were discussed by a number of London County Council's home tutors. Home teaching of handicrafts to the disabled was described by a member of the Council's Welfare Department. Content of discussions by groups of Conference participants is summarized; the closing remarks of Dr. H. G. Maule pointed out important points brought out in addresses and discussion groups. The value of correspondence courses through the British Council for Rehabilitation was stressed.

ABSTRACTS

HOSPITAL SCHOOLS—GREAT BRITAIN

593. Cook, Lorna (W. J. Sanderson Orthopaedic Hospital, Gosforth, Newcastle-upon-Tyne, England)

Work in a small orthopaedic hospital school. *Special Education*. May, 1960. 49:3:20-24.

The headmistress of a hospital school serving orthopedically disabled children, mainly from the primary and secondary school level, gives her impressions of pupils' reactions to hospitalization. Described are qualities required in the hospital school teacher, responsibilities of the head teacher, and objectives of hospital school instruction. Some techniques used with success are mentioned.

LEPROSY

594. Riordan, Daniel C. (1538 Louisiana Ave., New Orleans 15, La.)

The hand in leprosy; a seven-year clinical study: Part I, General aspects of leprosy; Part II, Orthopaedic aspects of leprosy. *J. Bone and Joint Surg.* June, 1960. 42-A:4:661-690.

The first part reviews the history of the disease, its etiology and epidemiology, a description of it according to types and their pathology, and present drug therapy. Bone changes are described briefly in Part 2; Part 3, to be published in a later issue of the *Journal*, will deal with reconstructive surgery of hand deformities in leprosy. For a seven-year period, beginning in 1949, Dr. Riordan served as orthopedic consultant in hand surgery to the U.S. Public Health Service Hospital at Carville, La.

See also p. 239.

MARRIAGE

See 582.

MENTAL DEFECTIVES—WISCONSIN

595. Burr, Anita M. (Child Psychiatry Clinic, University Hospitals, Univ. of Wisconsin, Madison, Wis.)

Learning to care for mentally retarded children. *Am. J. Nursing*. July, 1960. 60:7:1000-1003.

Describes a co-operative project of the Wisconsin Board of Health and the University of Wisconsin Medical School, planned to teach professional persons at the community level how to make an early medical, psychological, and social diagnosis of retarded children. Follow-up care for the retarded is demonstrated and its importance stressed. The author, a public health nurse with experience in child psychiatry, is nurse co-ordinator of the Child Psychiatry Clinic. Her role in the mental retardation training program for professional persons is to initiate and take part in follow-up care of retarded children referred to the Clinic. She offers some guidelines to help parents and professional personnel working with the retarded.

MENTAL DEFECTIVES—MENTAL HYGIENE

596. Farber, Bernard (Dept. of Sociology, Univ. of Illinois, Urbana, Ill.)

Perceptions of crisis and related variables in the impact of a retarded child on the mother. *J. Health and Human Behavior*. Summer, 1960. 1:2:108-118.

Since 1954 Dr. Farber has conducted a research project studying families with a severely mentally retarded child. (Monographs on aspects of the research, published by the Society for Research on Exceptional Children, were annotated in *Rehab. Lit.*, May, 1959, #426, and Apr., 1960, #258.) In this article he reports results of a study of the relationship between the type of crisis (defined as "tragic" or "role organization") and the emotional reaction of the mother. The pattern of findings suggested that tragic crisis tended to be found in families of high socioeconomic status and that the role organization crisis is generally a low-status phenomenon.

MENTAL DEFECTIVES—PARENT EDUCATION

See 551.

MENTAL DEFECTIVES—RESEARCH

597. U.S. Children's Bureau

Research relating to mentally retarded children. Washington, D.C., Govt. Print. Off., 1960. 92 p. (*Research relating to special groups of children*, no. 1)

Contains a listing of all research projects on mental retardation that have been reported to the U.S. Children's Bureau Clearinghouse for Research in Child Life since 1949. Most of those listed have been abstracted in various issues of *Research Relating to Children*, the Clearinghouse publication. Information given here includes title of project, duration dates, principal investigator, and publication references where available. An added aid is reference to the particular issue of *Research Relating to Children* in which each project is abstracted. Projects are listed under broad subject categories. An index of investigators is included.

Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 35¢ a copy.

MENTAL DEFECTIVES—SPECIAL EDUCATION

598. Bevan, John (Henderson School, 5650 S. Wolcott Ave., Chicago, Ill.)

Nondirective activities for the mentally handicapped; freedom, reflection of attitudes help pupils grow, learn. *Chicago Schools J.* May, 1960. 41:8:379-384.

A teacher of an advanced division of the mentally handicapped in a Chicago public school tells of an activities program using the nondirective approach, fostering self-sufficiency in students and making them responsible for what occurs in the program. Essential to successful conduction of nondirective activities is a regular time allotment, strictly followed. Secondly, pupils should understand that the time is primarily theirs and they will have considerable freedom in choosing how to use it. Two activity projects are described to illustrate application of the nondirective theory. Pupils participating were 10 boys and 5 girls, all mentally retarded and over 12 years of age.

MENTAL DISEASE

See 558.

MENTAL DISEASE—EMPLOYMENT

599. Gordon, Hiram L. (Box 21, Fort Lyon, Colo.)

A member-employee program as a rehabilitation tech-

REHABILITATION LITERATURE

nique, by Hiram L. Gordon and George D. Allen, *Am. J. Phys. Med.* July, 1960. 39:3:114-119.

Experiences with a member-employee rehabilitation program in operation at the VA Hospital, Ft. Lyon, Colo., since December, 1954, are related. An attempt has been made to determine those factors that might be helpful in predicting good adjustment of mental patients in the program. No one factor was found to predict which candidates would successfully complete the program and then stay in the community. Characteristics of the more successful patients are described. Complaints of member-employees concerning the program suggest ways for improvement of administration.

See also 612.

MUSIC THERAPY

600. Heimlich, Evelyn Philips (*Edenwald School, 225th St. and Boston Post Rd., Bronx 66, N.Y.*)

Music as therapy with emotionally disturbed children. *Child Welfare*. June, 1960. 39:6:7-11.

The music therapist at Edenwald School, a residential facility serving 64 retarded boys and girls from 8 to 16 years of age, tells how music is used as therapy to help establish communication with those who are emotionally disturbed. Media used are percussion instruments, folk songs, and chalking and painting to symphonic music. Three case histories illustrate the role of music therapy in the development of disturbed children.

NURSERY SCHOOLS

601. New York City Society for Crippled Children and Adults (123 E. 124th St., New York 35, N.Y.)

Preschool education of crippled children in New York City; an evaluation of a two-year demonstration day care program for crippled children, sponsored by the . . . 1957-1959; (by) Edward T. Clarke. New York, The Society, 1960. 85 p. tabs.

Under the direction of Sarah Jane Kinoy a nursery school program was begun in April, 1957, to provide socializing and educational experience for physically handicapped children who were not accepted in other nursery school or day care facilities. The staff of the Pre-School Center included the director, two teachers, one assistant teacher, a secretary, and a matron; part-time staff included a social worker, pediatrician, and registered nurse. The administration and activities of the Center are reported in detail. Also reported are evaluations of the children in their ability to function and to participate in play activities. Case studies are given. Parent education was part of the demonstration program. Results and implications of the program are discussed in the last chapter.

OLD AGE—PROGRAMS

602. Hospital Progress. June, 1960. 41:6.

This issue features a symposium on the care of the aged. Partial contents: General problems in long-term care, Ollie A. Randall.—The importance of nutrition, Sister Mary Loretto.—Medical care in long-term facilities, Charles J. Thill.—Mental health and aging, Jack Weinberg.—Nursing care: its importance, its problems, Flor-

ence L. Baltz.—Physical medicine and therapy, Joseph L. Koczur.—Rehabilitation, education, service, John A. Hackley.—Safety, maintenance, decoration in homes for the aged, Mrs. Campbell Keith.—Second class citizens? (editorial).—Spiritual aspects of care for the aged, Paschal Botz.

See also 561.

PARAPLEGIA—PHYSICAL THERAPY

603. O'Rourke, F. (*Austin Hosp., Melbourne, Australia*)

Paraplegia and the physiotherapist. *Australian J. Physiotherapy*. Mar., 1960. 6:1:9-14.

In same issue: Physiotherapy in paraplegia, G. M. Bedbrook (and others). p. 15-18.

The treatment principles in the three stages of care in a spinal center are outlined. The acute stage lasts from admission to union at the fracture site, a period of 6 to 8 weeks. In the intermediate stage the patient begins hyper-extension exercises and progresses to balancing exercises with crutches and calipers, taking from 3 to 9 months. In the final stage lasting another 3 to 6 months the patient learns to walk on his crutches and calipers. The work of the physical therapist is described briefly.

Dr. Bedbrook and his associates at the Paraplegic Unit of the Royal Perth Hospital describe the aims and activities of physical therapy in the three treatment stages.

PARTIALLY SIGHTED—EQUIPMENT

604. Faye, Eleanor E. (111 E. 59th St., New York 22, N.Y.)

Visual aids for the partially sighted. *Nursing Outlook*. June, 1960. 8:6:320-322.

The author, associate director of Low Vision Lens Service, The Lighthouse, New York City, defines "legal blindness" and the individuals who fall within this category. Such persons, entitled to certain benefits from the state, can often be helped by the provision of visual aids. Types of aids for correction of near and distant vision are discussed briefly; administration of the ideal low-vision clinic is considered.

PHYSICAL EFFICIENCY

605. Campbell, John W. (*California Rehab. Center, 1815 Ocean Front, Santa Monica, Calif.*)

The patient profile chart; a new method of disability evaluation, by John W. Campbell (and others). *Am. J. Occupational Ther.* May-June, 1960. 14:3:127-133.

The chart devised at the California Rehabilitation Center consists of a muscle test and a functional test, depicted in graph form, giving visual measure and dimensional quality to existing and accepted tests. Its clinical application is illustrated by a report of its use in a study of the distribution of paralysis and the functional status of 35 chronic postpoliomyelitis patients. The chart enables the clinician to recognize trends in recovery or lack of it, to plan total therapy, and to predict the probable functional success of clinic patients.

See also 561A.

ABSTRACTS

PHYSICAL THERAPY

606. Hickling, Jennifer

Manipulation. *Physiotherapy*. June, 1960. 46:6:160-165.

An objective assessment of the use of manipulation (passive movement done with varying force) by physical therapists, based on the author's experience as senior physiotherapist in the London clinics of Dr. Cyriax. The physician's examination technics and the principles upon which therapy is prescribed are discussed.

See also 562; 563.

PHYSICAL THERAPY—ADMINISTRATION

607. Zimmerman, James (3180 Eisenhower Rd., Columbus, Ohio)

A survey of the work load in physical therapy, by James Zimmerman and Ernest W. Johnson. *Phys. Therapy Rev.* June, 1960. 40:6:448-452.

A questionnaire survey of 10 large hospitals in metropolitan areas of Ohio yielded data on total number of monthly patient treatments, number of therapists, average number of patient treatments by each per month, and the modalities used. Findings should be useful in estimating the work load of the department, in gauging operational efficiency, and in the setting up of work schedules.

POLIOMYELITIS

See 605; 611.

POSTURE

See 563.

PUBLIC ASSISTANCE

608. Wilbourn, Thelma (Alexander Co. Dept. of Public Aid, Cairo, Ill.)

"It's like starting life all over again." *Public Aid in Illinois*. May, 1960. 27:5:5-8.

The combined efforts of the Illinois Division of Vocational Rehabilitation and the County Department of Public Aid achieved the rehabilitation of the Carter family, whose story is told here. Loss of employment because of complete blindness only strengthened Mr. Carter's determination to return to independent living. Over an eight-year period counseling and various forms of aid were extended to members of the family, with the outcome successful in 1959.

REHABILITATION

609. Rida, Amin (19, Midan Saad Zaghloul, Alexandria, UAR-Egypt)

Musculo-skeletal handicaps in children; Part I, Aetiology, morphology and prophylaxis; Part II, Treatment. *Alexandria Med. J.* Mar. & May, 1960. 6:2 & 3. 2 pts.

Presents a classification of orthopedic conditions that may lead to crippling, the functional symptoms associated with them, types of resulting deformities, and the primary and secondary preventive measures to be taken in coping

with such conditions. Part II discusses treatment and the facilities needed for prevention and management of crippling conditions. Management of bone and joint tuberculosis and infantile paralysis are discussed in some detail to illustrate how the principles of treatment are applied. Clinical and public health aspects of the problem are stressed.

REHABILITATION—PROGRAMS

See p. 239; 556; 557.

REHABILITATION—SURVEYS

See 554.

REHABILITATION—SURVEYS—MINNESOTA

610. Minnesota. University. Industrial Relations Center

Minnesota studies in vocational rehabilitation: X. A definition of work adjustment, by Thomas B. Scott (and others). Minneapolis, The Center, 1960. 75 p. (*Bul.* no. 30, May, 1960)

Since most research problems in rehabilitation involve evaluation criteria, the Vocational Rehabilitation Research Laboratory of the Industrial Relations Center reviewed the psychological, sociological, and economic literature pertinent to the defining of the work adjustment concept. Parts II through VI cover literature on job satisfaction, studies on morale and employee attitudes, related literature on worker motivation, on behavioral criteria, and on vocational fitness as an indicator of work adjustment. Part VII summarizes findings from the literature and offers a research definition of work adjustment. (For references to other studies in the series, see *Rehab. Lit.*, Dec., 1958, #1300, and Mar., 1959, #190 and 268.)

Available from University of Minnesota Press, 2037 University Ave., S.E., Minneapolis 14, Minn., at 75¢ a copy, plus postage. (Less in quantity orders.)

REHABILITATION CENTERS

See 561A.

RELIGION

See 557.

RESPIRATION

611. Brody, Alfred W. (Creighton Univ. School of Medicine, Omaha 2, Neb.)

Pulmonary function tests in rehabilitation. *Arch. Phys. Med. and Rehab.* June, 1960. 41:6:215-219.

Major purposes of the use of pulmonary function tests to measure the extent of respiratory disability are listed. Their application in paralyzed patients undergoing rehabilitation is discussed in some detail, with findings from tests in paralyzed patients compared with those in persons having emphysema. Vital capacity tests may be used to predict fairly closely the period of time the chronic patient with paralysis can remain free of respiratory assistance. The maximal breathing capacity test is rarely employed in paralyzed patients but is important in intrinsic diseases of the lungs.

REHABILITATION LITERATURE

SHELTERED WORKSHOPS

612. Freudenberg, R. K. (*Netherne Hosp., Coulsdon, England*)

Sheltered workshops within the mental hospital, by R. K. Freudenberg and Anne E. Constable. *Occupational Ther.* May, 1960. 23:5:19-26.

In same issue: Some views on sheltered workshops for the mentally handicapped, N. Speijer. p. 27-30.

Dr. Freudenberg, physician superintendent of Netherne Hospital, discusses industrial contract work in the mental hospital sheltered workshop, a recent rehabilitation experiment in Great Britain. Extensive research is being conducted at the hospital to determine types of patients best suited for assignment to the workshop, ways of overcoming patients' interpersonal difficulties, effective organization of a continuous industrial program, and results of the industrial rehabilitation scheme. Miss Constable, head occupational therapist at the hospital, describes types of sheltered employment available in the workshop and some of the administrative aspects involved. Both papers were presented at the Second National Congress of the Association of Occupational Therapists (Great Britain).

Dr. Speijer (*Municipal Health Service of The Hague, The Netherlands*), advisory psychiatrist to the society in The Hague that operates a sheltered workshop currently serving 370 patients, discusses basic functions of workshops for the mentally handicapped, both those suffering mental illness and those who are mentally defective.

See also 552.

SHELTERED WORKSHOPS—ADMINISTRATION

613. Alabama. University

Management of the sheltered workshop; a report of the Institute for Sheltered Workshop Management . . . November 2-6, 1959, sponsored by the . . . and the Office of Vocational Rehabilitation. . . University, Ala., The University, 1960. 29 p. (Univ. of Alabama Extension News Bul. Apr., 1960. 17:10)

A summary of the statements and discussions made during the Institute, one of several training ventures undertaken by vocational rehabilitation agencies in Region IV of the U.S. Office of Vocational Rehabilitation's program. Subjects covered included: history and development of the workshop movement, organization and administration of the local workshop, types of work and production policies, contracts and sales, public relations, and rehabilitation services provided. The appendix contains an index of federal regulations covering employment of the handicapped in sheltered workshops.

Issued by the Extension Division, University of Alabama, University, Ala.

SOCIAL SERVICE—CASEWORK

614. Rapoport, Lydia (*Harvard Univ. School of Public Health, Boston, Mass.*)

Teamwork in a rehabilitation setting; a case illustration, by Lydia Rapoport and Kate S. Dorst. *Soc. Casework.* June, 1960. 41:6:291-297.

Basic principles of effective teamwork in a rehabilitation program for the physically disabled are illustrated through presentation of a case history. The subject, a severely handicapped cerebral palsied man, 21 years of age,

achieved independence although still confined to a wheel chair. Seven distinct professional disciplines and numerous specialists within the disciplines were involved in his care, as well as a variety of community facilities and resources.

SOCIAL WELFARE—PROGRAMS

See 556.

SPECIAL EDUCATION

See 560.

SPECIAL EDUCATION—RESEARCH

615. Carriker, William R. (*U.S. Off. of Education, Washington 25, D.C.*)

Research related to physically handicapped and emotionally maladjusted children. *School Life.* Apr., 1960. 42:8:11-15.

Other reports in earlier issues: Research related to the education of mentally retarded children, William R. Carriker. Jan., 1960. 42:5:26-28.—Research related to pupils with special abilities, William R. Carriker and William Asher. Feb., 1960. 42:6:19-23.

This article in the April, 1960, issue of *School Life* is the third and last in a series of summaries of research projects related to problems in special education; all projects have been conducted under the U.S. Office of Education's Cooperative Research program. The three articles appearing in the January, February, and April issues of the magazine discuss a total of 101 projects.

SPEECH CORRECTION

616. Mecham, Merlin J. (*Dept. of Speech, Brigham Young Univ., Provo, Utah*)

Measurement of verbal language development in cerebral palsy. *Cerebral Palsy Rev.* May-June, 1960. 21:3:3-4.

The author devised an informant-interview scale to assess the communicative activities of children who do not respond to direct testing procedures. This scale was an extension of the communication portion of the Vineland Social Maturity Scale. Originally intended as a screening device, it has since been modified and expanded as a diagnostic tool to assess verbal language delay. In this article the author reports its use with normal and feeble-minded children to test its reliability and validity. Its satisfactory use with a group of 30 cerebral palsied children is also reported. The *Verbal Language Development Scale* is available from the Educational Test Bureau, 720 Washington Ave., S.E., Minneapolis 14, Minn.

SPEECH CORRECTION—OHIO

617. Hyman, Melvin (*Speech and Hearing Clinic, Bowling Green State Univ., Bowling Green, Ohio*)

In our northwest sector, speech and hearing therapy explosion. *Ohio's Health.* Apr., 1960. 12:4:9-14.

Combined efforts of parents, teachers, professional persons, and local agencies in northwestern Ohio have resulted in the establishment of new clinics and expanded services to school age children with speech and hearing defects. Statistics illustrate the amazing growth of such programs in this area. The speech and hearing therapy program of Bowling Green State University is described,

EVENTS AND COMMENTS

as well as services available in clinics and schools. Role of the Ohio Department of Health in expanding services is mentioned.

SPEECH CORRECTION—INSTITUTIONS

618. McConnell, Freeman E. (*Vanderbilt Univ. School of Medicine, Nashville, Tenn.*)

Planning of a multi-purpose speech and hearing facility. *Asba*. June, 1960. 2:6:175-177.

A description of the Bill Wilkerson Hearing and Speech Center, Nashville, Tenn., completed in 1958. Planned to provide for the combined activities of clinical services, student training, and research, the Center's floor plan incorporates six basic areas, each serving a particular service or function. Floor plans of the areas serving the audiology and speech clinics are included. A preschool education area consisting of three rooms serves children with hearing impairment in two age groups and cerebral palsied preschool children. Details of planning and equipment are discussed.

STUTTERING

619. Adler, Sol (609 Magnolia Ave., Johnson City, Tenn.)

Stuttering; its source and its solution. *Nursing World*. June, 1960. 134:6:18-21.

Dr. Adler, Director of East Tennessee State College's Speech and Hearing Clinic, offers some facts, now fairly well established, on the nature of stuttering and the management of the stutterer. Written for the public health, school, or pediatric nurse, it advises on general handling of the stuttering child and problems the adult stutterer must overcome. Parents also could profit from the discussion Dr. Adler presents.

TUBERCULOSIS

620. Appleby, L. (*Osawatimie State Hosp., Osawatimie, Kan.*)

Toward a therapeutic community in a tuberculosis

hospital, by L. Appleby (and others). *Am. J. Occupational Ther.* May-June, 1960. 14:3:117-120.

The program, described here as a preliminary experimental attempt to develop a rehabilitative atmosphere in a tuberculosis institution, places the burden of rehabilitation and, indirectly, medical treatment on the patient and not on the staff. A patient government, representatively elected from the various wards, plays the key role in the large "family environ." Such group-living would closely parallel the world to which the patient will return and would make unnecessary posthospital retraining for the restoration of patients to normal living in the community.

VOCATIONAL GUIDANCE

See 560; 610.

VOCATIONAL GUIDANCE—PERSONNEL

621. Patterson, C. H. (*Univ. of Illinois Coll. of Education, 1102 College Court, Urbana, Ill.*)

Characteristics of vocational rehabilitation counselor trainees. Urbana, The Author, 1960. 21 p. tabs.

The final report of a study supported in part by the Office of Vocational Rehabilitation Special Project Grant 86-57 and 86-58 and the Bureau of Educational Research, University of Illinois. A total sample of approximately 550 students entering rehabilitation counselor training was studied over a 3-year period; summary tables on results of administering a battery of tests are included. Results of the study may be used as tentative norms in the selection of rehabilitation counselor trainees. A preliminary report by Dr. Patterson, published in 1958, was annotated in *Rehab. Lit.*, May, 1959, #452.

WALKING—EQUIPMENT

622. Hooker, Ralph F. (*VA Center, Temple, Tex.*)

Measuring instruments for ambulation aids; the Ambulaidometer, by Ralph F. Hooker and Manfred R. M. Blashy. *J. Assn. for Phys. and Mental Rehab.* May-June, 1960. 14:3:69-70.

Describes and illustrates an adjustable rod for measuring patients for crutches or other walking aids.

Events and Comments

Los Angeles County Reports On Study of Needs of Multiply Handicapped Deaf Children

THE STUDY COMMITTEE on needs of deaf children with other handicaps of the Los Angeles county schools, reported in March of this year on their recommendations to the County Superintendent of Schools. The Committee, under the chairmanship of Harry Smallenburg, director of the division of research and guidance, found that: 1) A diagnostic and evaluation facility was urgently needed for deaf chil-

dren having other handicaps, which need could be met within the structure of the state department of education, possibly by a residential school. 2) The state legislature should provide better financial support for local school systems willing to provide special schooling for multiply handicapped children, including the deaf who are mentally retarded or otherwise severely handicapped. 3) More state support is needed also to secure supervisory, co-ordinative, or other personnel essential to extending work experience programs or occupational training programs to handicapped students. 4) Throughout California special education facilities and programs are needed for

deaf children with further severe limitations. The state should promptly establish a residential school for the deaf or multiply handicapped deaf children, including the emotionally disturbed, and those with communication disorders not based on deafness or mental retardation. 5) Enough deaf-mentally retarded children have been tentatively identified in Greater Los Angeles and vicinity for the establishing of two or more demonstration classes. 6) The California administrative code should be changed so that severely mentally retarded pupils who are deaf or hard of hearing may be eligible to enter classes for the severely mentally retarded.

Research on Deafness Studied at Workshop at Gallaudet College

A WORKSHOP ON "Identification of Researchable Vocational Rehabilitation Problems of the Deaf" was held June 19 to 22 at Gallaudet College in Washington, D.C. (See #585, this issue of *Rehab. Lit.*) The College and its president Dr. Leonard M. Elstad sponsored the sessions under a U.S. Office of Vocational Rehabilitation grant. Dr. Powrie V. Doctor, editor, *American Annals of the Deaf*, and professor of history and political science at Gallaudet, directed the workshop.

About 65 persons, both deaf and hearing, attended, selected from the areas of audiology, business administration, education, linguistics, psychology, psychiatry, rehabilitation, sociology, speech therapy, history, and political science. Sessions covered psychological assessment of the deaf; social development; language; vocational development; and family, genetics, and institutionalization.

Dr. Gilbert R. Barnhart, chief of the OVR Division of Research, Grants, and Demonstrations, explained the purpose and scope of the workshop to the group, stating, "Since early 1955 the U.S. Office of Vocational Rehabilitation, under its research program, has approved more than 300 projects. These cover almost all disability groups, as well as methods and programs for providing service, and various administrative problems facing state vocational rehabilitation agencies. Only a few of the 300 projects relate to deafness. For that reason the Office of Vocational Rehabilitation is providing financial support to the current workshop with the hope that more and better research projects in vocational rehabilitation of those with deafness will develop."

WHO Committee Stresses Need for Salk And Live Poliomyelitis Vaccines

THE WORLD Health Organization Expert Committee on Poliomyelitis met in Washington, D.C., in mid-June under the chairmanship of Prof. Stuart Harris of the University of Sheffield, England, to consider progress in the control of poliomyelitis by vaccination. The meeting followed a week's conference on live poliomyelitis vaccine convened jointly by Pan American Health Organization and WHO.

The Committee pointed out that the Salk vaccine, when properly used, had achieved over 90 percent success in conquering paralytic poliomyelitis but was expensive and difficult to administer, especially in countries without well-developed health services. Especially in these areas oral use of live vaccine as a liquid or in candies would be easier and more economical. The Committee felt the live vaccine was now proved safe for children in huge trials in America, Africa, and Eastern Europe. Over

60 million had been vaccinated in the USSR alone without reported ill effects. The Committee reserved judgment about its widespread use in countries where poliomyelitis affected a higher proportion of adults, because of lack of data and because infection is more risky in adults who have never been in contact with the virus. It was thought the live vaccine had not yet been adequately tested for safety in this highly susceptible group. Salk vaccination was advocated for primary immunization in parts of North America and Northern Europe and where adults often contract the illness but it was felt the live vaccine could be used as a booster. The virus in the vaccine, although safe when given to children, infects close contacts, normally immunizing them without harm, but it changes a little sometimes in the process, and it becomes more likely to cause symptoms in especially susceptible persons. In the giving of the vaccine to many tens of millions there was little evidence that this occurred, but the Committee felt this point had not been fully established.

Information on the live vaccine's effectiveness was not conclusive as to its degree under all circumstances. Complicating in the effectiveness of these vaccines is the blocking effect of interfering intestinal infections caused by viruses circulating in the community, a frequent circumstance in tropical areas. Progress toward the solution of this problem is being made. In this regard, the Committee stressed that the new vaccine could not be relied on to give full protection in one dose and that repeated use is needed.

Although hopeful for the future, the Committee emphasized that many problems remain to be solved. Highlighted was the problem of the elimination of other difficult to detect viruses in the cultures of monkey kidney tissue used in growing the vaccine virus.

Books and Periodicals on Rehabilitation To Be on Display at 8th World Congress

A LIBRARY on rehabilitation literature has been planned as the exhibit of the National Society for Crippled Children and Adults at the Eighth World Congress sponsored by the International Society for the Welfare of Cripples. The editor of *Rehabilitation Literature*, who is also librarian at the National Society, will be in attendance at the exhibit.

The display consists of current books, pamphlets, and professional journals that together represent available publications suitable for the professional library of a rehabilitation facility or agency. A checklist of all the publications on exhibit has been prepared for distribution. The list is also available on request from the Library of the National Society.

NSCCA Initiates Study on Workshops

A RESEARCH project on problems of procurement and production of sheltered workshops for physically handicapped adults was begun July 1 by headquarters of the National Society for Crippled Children and Adults. It is partially supported by a grant from the U.S. Office of Vocational Rehabilitation. Principal investigator of the three-year project will be Michael M. Dolnick, senior research analyst on the Society's staff since 1948. An advisory committee composed of representatives of principal organizations in the sheltered workshop field will help guide the project.

Conference of Rehabilitation Centers and Facilities to Hold Workshop on Evaluation

THE NINTH Annual Workshop and Membership Meeting of the Conference of Rehabilitation Centers and Facilities (928 Davis St., Evanston, Ill.) will be held at the Claremont Hotel, Berkeley, Calif., December 2 to 6. The central theme is Evaluation and sessions will cover standards, reporting, research, and trends. The workshop chairman is Sedgwick Mead, M.D., 2600 Alameda St., Vallejo, Calif.

Glenn E. Jackson Retires as Executive Director of AOPA

ON OCTOBER 31, Glenn E. Jackson will retire as executive director of both the American Orthotics and Prosthetics Association and the American Board for Certification. Mr. Jackson has held this post with the Association since 1946 and with the Board since its inception in 1948.

A special committee has recommended that staff members fill the two positions, Lester Smith as executive director of the Association and Lee Nattress as executive director of the Board, and that Mr. Jackson continue to serve as consultant, with the specific responsibility of representing both organizations with the Office of Vocational Rehabilitation.

Correction Notice

New Bibliography Series of The National Foundation

IT WAS INCORRECTLY reported in the June issue of *Rehabilitation Literature*, p. 204, that *Current Literature: Congenital Anomalies* superseded the monthly *Poliomyelitis and Related Diseases*. The latter is still being published. In July, as part of the Current Literature Series, the Foundation began publication of a monthly bibliography on *Arthritis and Related Diseases*.

EVENTS AND COMMENTS

Study Shows Rheumatoid Arthritis More Prevalent Than Believed

EVIDENCE presented June 11 at the scientific session of the American Rheumatism Association at Hollywood, Fla., and based on 20 check-ups over a 28-month period indicated that rheumatoid arthritis may be at least six times as widespread as the 2½ percent incidence generally assumed. The recent survey shows that: Mild rheumatoid arthritis affects about 15 percent of regularly employed plant workers; the course of disease is mild to moderate and disability is rare; it occurs most frequently in men between the ages of 50 and 66 years.

These findings were announced by Dr. Thomas A. Lincoln, medical director, Oak Ridge (Tenn.) National Laboratory. The 28-month study included medical screenings of 331 craftsmen and their foremen in maintenance shops, monthly for the first 16 months and quarterly thereafter. By the end of the study, 5 percent had conditions diagnosed as "definite" rheumatoid arthritis, while another 10 percent had received a "probable" diagnosis. It was felt that the percentage would have run higher if the study had been continued longer, for in the first month only 2 percent met the criteria for probable or definite rheumatoid arthritis. Of the 93 men between the ages of 50 and 66, 10 percent had definite rheumatoid arthritis and an additional 12 percent had probable. The cases seen in the study seemed to run a benign remittent course with mild to moderate symptoms and little disability, in contrast to those seen in clinics and consulting rooms.

World Commission on Cerebral Palsy To Sponsor 8th World Congress Sessions and Postgraduate Course

SPECIAL SCIENTIFIC sessions will be held by the World Commission on Cerebral Palsy, one of the expert groups of the International Society for the Welfare of Cripples, during the Society's Eighth World Congress held in New York City, August 28 to September 2. The all-day sessions will be held at the Waldorf Astoria Hotel, Wednesday, August 31. Professionals and lay people interested in the field are invited.

From September 6 to 23, the Commission will sponsor an international postgraduate course to be held in co-operation with the Institute for the Crippled and Disabled and the United Cerebral Palsy Associations primarily for participants from outside the United States. The course will try to study the whole set of disorders labeled cerebral palsy and to thoughtfully appraise present-day management. About 30 lecturers contributing to the biosocial approach will be asked to supplement theoretical differences by demonstrating the practical application of their points of view.

Oklahoma Ministers and Physicians Hold Seminar on Handicapped

A MINISTERS-PHYSICIANS Seminar was held in Oklahoma City, May 10-11, to discuss problems of handicapped persons. A dinner held at the First Presbyterian Church opened the meeting; problems discussed by a panel of handicapped persons were those encountered in securing public acceptance and in adjusting satisfactorily to society's demands. The next day the panel members and other speakers—two physicians, a social worker, and a psychologist—discussed popular public misconceptions of the disabled and the medical, psychological, and spiritual needs that might be met better by physician and minister working as a team. Small groups of members of the two professions then met to discuss mutual problems.

Health Information Leaflets Issued

TWO NEW U.S. Public Health Service leaflets prepared by the National Institute of Neurological Diseases and Blindness are *Cerebral Palsy: Hope Through Research* (Public Health Serv. publ. 713, Health Info. ser. 95) and *Mongolism: Hope Through Research* (Public Health Serv. publ. 720, Health Info. ser. 94). Available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.; both are priced at 5¢ a copy, \$3.00 per hundred.

Dr. Whitehouse Comments on Rehabilitation

"REHABILITATION is a subversive movement to our present public and even professional way of life. It is undermining some of the false values of today; it is destroying a naive single-dimensional view of human beings; it has led to the discard of much narrow research; it will lead to greater curricula revisions in the training of all professions than has happened to date. It has become a new abolition movement against the slavery and tyranny of disablement.

Society needs very much her courageous social scientists, and rehabilitation is a field which requires great courage to withstand the very mirrors of ourselves in time, which our clients represent. It takes fortitude to resist with the few weapons we have, the ignorance, the frequent unconcern of our community, and the pitiful inadequacy of our sciences compared to our professional commitments. This responsibility must always be taken seriously, this trust always met with dedication, this ideal always cherished." —From *"Some Psychological Factors That Influence Rehabilitation of the Cardiac,"* by Frederick A. Whitehouse, Ed.D., presented at the Seminar for Vocational Counselors, Chicago Heart Association, June 10, 1960.

1960 Directory of Certified Orthopedic Appliance Firms Issued

THE NEW 1960 *Registry of Certified Prosthetic and Orthopedic Appliance Facilities* has been issued by the American Orthotics and Prosthetics Association (919 18th St., N.W., Washington 6, D.C.). Firms certified by the American Board of Certification of AOPA are listed by state and city. This 32-page booklet has been distributed to all members of the American Academy of Orthopaedic Surgeons and the American Congress of Physical Medicine and Rehabilitation and is available without charge to other interested professional persons and organizations.

Newspaper on Pediatrics Issued

VOL. 1, ISSUE 1 of *Pediatric Herald*, a 12-page monthly newspaper, was published in July. The *Herald* is made available to the medical profession through the sponsorship of Wyeth Laboratories, Gerber Products Company, and Pfizer Laboratories. It is published by the Pediatric Herald Publishing Co., Inc., 22 E. 60th St., New York 22, N.Y.

NRA Graduate Awards Announced

THE GRADUATE Assistance Program of the National Recreation Association's Consulting Service on Recreation for the Ill and Handicapped has awarded for 1960 a total of \$15,000 to five persons. The funds were supplied the Service by the Avalon Foundation. The program, established in 1958, was begun because of the serious shortage of qualified professional recreation workers for the ill and handicapped. Graduate students are assisted to specialize in this area. From 92 applicants the following were selected for the awards: Priscilla H. Bowdle, recreation director, pediatrics, Roosevelt Hospital, New York, N.Y.; John A. Nesbitt, Miami Beach, Fla., program director, Junior Chamber of Commerce International; Mrs. Anne H. McInnes, director of volunteers, Seaview Hospital, Staten Island, N.Y.; Richard O. Parker, Glen Alpine, N.C., a recreation specialist planning graduate study at the University of North Carolina; and Barbara C. Mumford, Seattle, Wash., director of recreation programs for mentally retarded children, physically handicapped children, and the aged, King County Park and Recreation Department of Seattle.

The deadline for filing for the 1961-1962 awards is next March 15. Applicants for aid toward a master's degree must have received their bachelor's degree by June, 1961. Those applying for the advanced program must have their master's degree and several years' experience in recreation for the ill and handicapped. For further information, write the Consulting Service on Recreation for the Ill and Handicapped, National Recreation Association, 8 W. Eighth St., New York 11, N.Y.

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